DOCUMENT RESUME

ED 043 130 EA 003 081

AUTHOR	Patterson, D . Jeanne
TITLE	Regional Demand for Post-High School Education. Long-Range Needs and Resources. Working Papers.
INSTITUTION	Indiana Advisory Commission on Academic Facilities, Bloomington.; Indiana Conference on Higher Education, Indianapolis.
PUB DATE	69
NOTE	214p.
EDRS PRICE	EDRS Price MF-$1.00 HC-$10.80
DESCRIPTORS	*Educational Demand, Educational Needs, *Educational Planning, Educational Resources, *Enrollment Influences, Enrollment Trends, Estimated Costs, Facility Requirements, *Facility Utilization Research, *Higher Education, Regional Planning

ABSTRACT

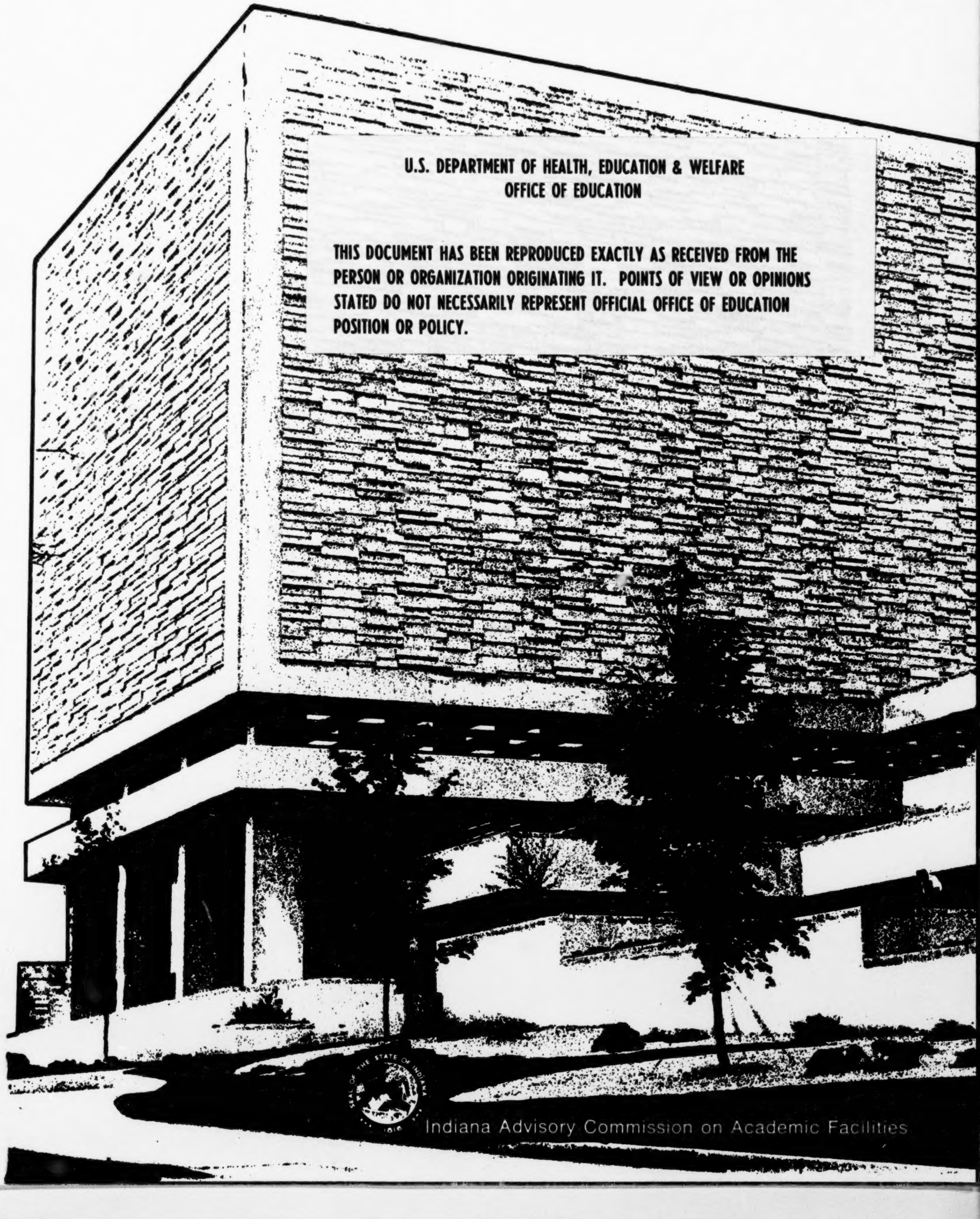
This study documents the second of three phases of the Indiana Higher Education Facilities Comprehensive Planning Study. Papers comprising this second phase of the study are devoted to long-run forecasts of needs and resources and related significant considerations. This portion of the study focuses on regional demand for higher education and considers that demand in view of potential enrollment. In an analysis of student demand, the report presents statistics showing a breakdown of college and university students by counties; examines regional variations in college enrollment; and analyzes the reasons for these differences. A related document is E A 003 080. (JF)

ED0 43130

Higher Education in Indiana

REGIONAL DEMAND FOR POST-HIGH SCHOOL EDUCATION

LONG-RANGE NEEDS AND RESOURCES Working Papers



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Indiana Advisory Commission on Academic Facilities

INDIANA HIGHER EDUCATION FACILITIES COMPREHENSIVE PLANNING STUDY

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REGIONAL DEMAND FOR
POST-HIGH SCHOOL EDUCATION

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Prepared for
THE INDIANA ADVISORY COMMISSION ON ACADEMIC FACILITIES
in cooperation with
THE INDIANA CONFERENCE OF HIGHER EDUCATION
1969

FOREWORD

This paper is one of a series of specialized reports prepared as a part of a comprehensive study designed to provide a clear profile on an institutional and statewide basis of the current and future relationships between the demand for and the supply of higher education in Indiana. The study, which is programmed in three phases, will make possible the determination of the needs for higher education resources and facilities, as well as identification of various feasible alternatives for meeting those needs.

Survey data and analysis comprising the first phase of the study were published last year in a series of five current status reports, dealing with finances, enrollments, programs and personnel, student migration, and facilities inventories and utilization. Papers comprising the second phase of the study are devoted to long-run forecasts of needs and resources and related significant considerations. The third phase of the study will consist of a final report that will relate the data and the findings developed during the first phases of the study and include a proposed higher education computer simulation model designed to facilitate the analysis of the probable impact of a wide range of variables.

With cooperation from the Indiana Conference of Higher Education, the Indiana Higher Education Facilities Comprehensive Planning Study is sponsored by the Indiana Advisory Commission on Academic Facilities under grants from the U.S. Office of Education authorized by the Higher Education Facilities Act of 1963 (PL 88-204), as amended.

While emphasis of the comprehensive study is directed toward facilities needs, it is recognized that those needs are and will continue to be significantly affected by a broad spectrum of factors exerting substantial influences. The overall effort is, therefore, multifaceted and designed to provide both factual data and professional analysis and opinion for higher educational policy makers at the institutional as well as state level. A resulting end product will hopefully be the encouragement of efficient higher education resources utilization and the progressive provision of academic facilities in keeping with realistic needs in consonance with available resources and compatible with programmed needs and demands.

The views and opinions expressed in this paper are those of the author and do not necessarily reflect those of the Indiana Advisory Commission on Academic Facilities, the Indiana Conference of Higher Education, or the Study Director and other members of the staff.

R. E. Masters
Executive Secretary
Indiana Advisory Commission
on Academic Facilities

ABOUT THE SERIES

This working paper is one of a series of specialized reports that have eminated from the Higher Education Facilities Planning Study undertaken in the summer of 1967 with the sponsorship of the Indiana Advisory Commission on Academic Facilities and the Indiana Conference on Higher Education.

As part of the study, a series of current status reports on the needs and resources of Indiana institutions of higher learning were published in the summer of 1968. These included the following:

Current Status Report 1-Finances
Current Status Report 2-Enrollment Projects
Current Status Report 3-Programs and Personnel
Current Status Report 4-Student Migration Patterns
Current Status Report 5-Facilities Inventory and Utilization

The working paper series results mainly from staff research during the second year of the study. Papers tentatively scheduled to be published in this series are:

A Simulation Model for Post-High School Education
Demand for Academic Programs
Determinants of Cost Differences
Faculty and Staff Needs
Financing Higher Education
Regional Demand for Post-High School Education
Survey of High School Senior Education Intentions
The Future Space Requirements

The final report, which will be based on all previous staff research efforts over the course of the study, is scheduled to be published in late 1969.

Our purpose in publishing this working paper series is to make available to those requesting documentation much of the research detail behind the findings and projections presented in our final report. The papers are essentially in draft form and do not necessarily receive the endorsement of other members of the staff, the membership of the Advisory Commission on Academic Facilities, or the Indiana Conference on Higher Education.

Charles F. Bonser
Study Director
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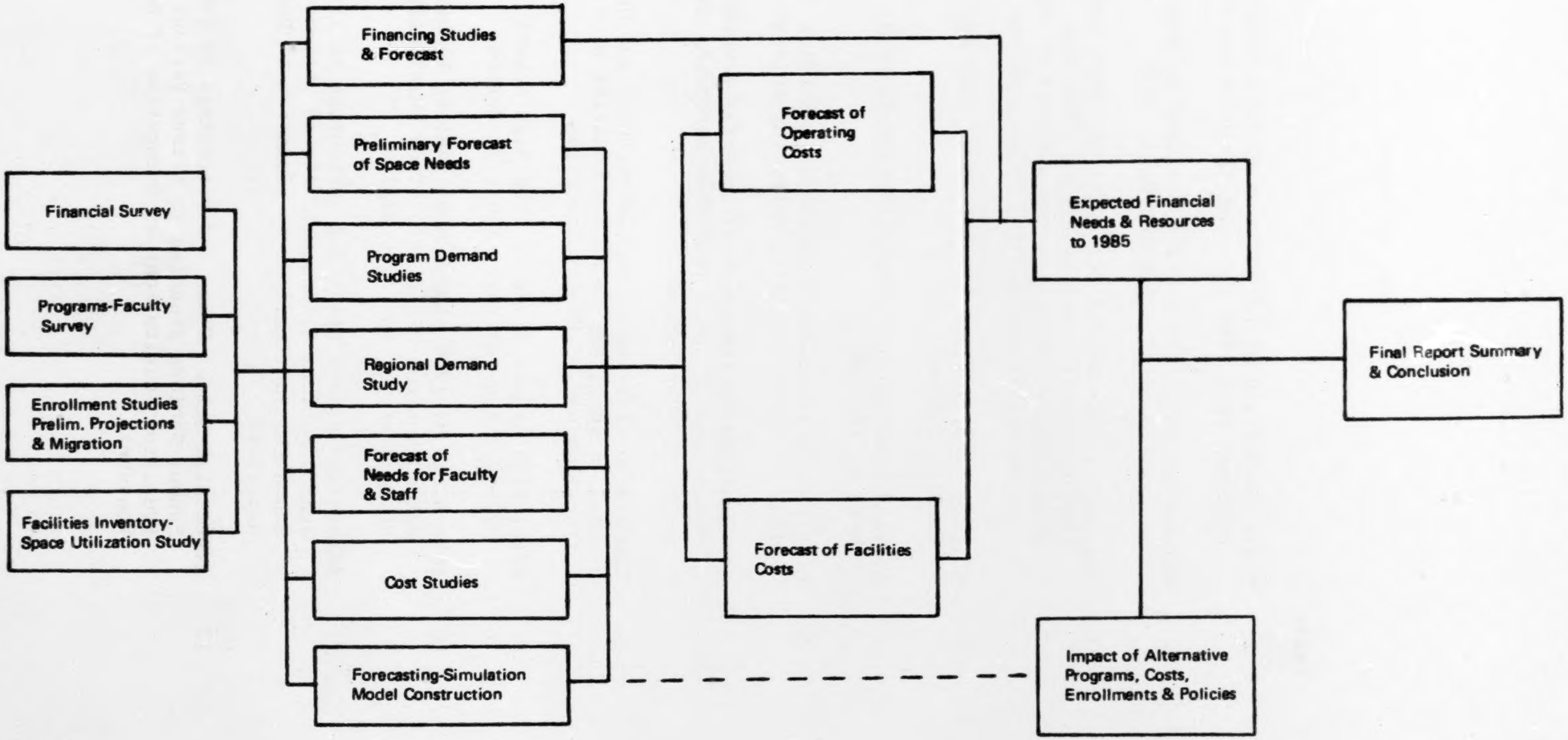
DESIGN OF INDIANA HIGHER EDUCATION FACILITIES STUDY


Financial Survey
Programs-Faculty Survey
Enrollment Studies Prelim. Projections & Migration
Facilities Inventory-Space Utilization Study
Financing Studies & Forecast
Preliminary Forecast of Space Needs
Program Demand Studies
Regional Demand Study
Forecast of Needs for Faculty & Staff
Cost Studies
Forecasting-Simulation Model Construction
Forecast of Operating Costs
Forecast of Facilities Costs
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PART I

CURRENT DEMAND AND SUPPLY

I. INTRODUCTION

The Higher Education Facilities Comprehensive Planning Study is concerned with Indiana postsecondary educational needs and resources through 1985. This portion of the study, which is concerned with regional demand, considers demand in view of potential enrollment, that is, defined as the number of students who might be served through regional institutions of higher education. Although the social and economic needs for educated citizens are well known, they will not be quantified in this study. Rather, we will attempt to measure student demand. In order to analyze student demand, we will present statistics showing a breakdown of college and university students by counties, and we will consider the demand for regional education. In short, regional variations in college enrollment and the reasons for these differences will be analyzed; student interest in (or demand for) institutions serving primarily a regional market (such as institutions geared primarily to commuters) will also be studied.

We must necessarily refer to present institutions and make some assumptions about possible future institutions. However, the purpose of this discussion is not to analyze or criticize present institutional or jurisdictional arrangements. Rather, various public and private educational institutions will be studied in order to give a concrete basis for analyzing the enrollment in various systems and to help project the results of expanding the present institutional system.

Part I discusses students and schools, or demand and supply. It analyzes what we know in 1969 about students' educational interests, their regional distribution, and how the present institutional system accommodates regional demands. (For a description of the various Indiana institutions, see Curtis L. Borton and Raleigh Holmstedt, "Programs and Personnel," Higher Education in Indiana: Needs and Resources 1968-85, Current Status Report 4 (Bloomington, Ind.: Bureau of Business Research, 1968). Part II, which discusses the future, offers projections about the demand for regional institutions. Several hypothetical educational systems have been constructed in order to estimate the impact of regional enrollment and to analyze shifts and increases within the system.

EFFECTIVE DEMAND

Current enrollment trends do not necessarily identify all those students who want (demand) a higher education, but they do identify those who have already enrolled. Part I begins with a discussion of these students, who represent effective demand. We also present the regional (county) differences that now exist in higher education enrollment and refer to them as differences in participation rate. More complete data on the activities of Indiana students over time will provide a more thorough picture of effective demand, but probably no amount of detail will explain all the variations noted.

This study will use three measures of regional differences in college enrollment. First, there are statistics on enrollment in Indiana institutions of higher education, by county of residence, and a breakdown of this enrollment, which determines the proportion of local students in the enrollment. Second, two forms of the participation rate of county youths are presented. A 1968 census of freshmen in Indiana institutions, which is compared with a similar 1960 freshmen census, shows the number of freshmen enrolled as a percentage of high school graduates (by county). In addition, for 1967-68 we can compare the participation of the 18-21 age group to total Indiana undergraduates in Indiana institutions of higher education. The differences in these forms are presented, and the variances in undergraduate participation rates are discussed as they relate to county variations in income levels and the presence of a college or university in the county. Third, the results of a 1969 survey of high school seniors conducted in cooperation with the Indiana Vocational Technical College suggest several ways of measuring effective demand. Although this questionnaire varies in some details, it provides a good deal of information about seniors' plans and interests and can be compared with a similar 1966 IVTC survey.

CURRENT SUPPLY

In Part I we will also survey the current supply (actual number of schools) and the types of students being served by various public and private schools. We are concerned not only with the accessibility of higher education facilities to the majority of Indiana youths but also with their propensity to commute. This study examined the local influence of various institutions by looking at the residence patterns of their students, and some differences between public institutions, the regional public campuses, and the average private institutions were discovered. For example, the enrollment at the regional campuses is made up of the largest portion of local youths, with the main campuses and the private institutions following in respective order. However, it was found that the biggest variation in enrollment between public and private institutions is in the percentage of Indiana students to total enrollment. Such differences will be explored in Chapter 3.

The characteristics of students in present institutions will also be discussed in this section. Although little information is available about the socioeconomic grouping of most students, considerable information is available about the students attending Indiana University's regional campuses. Such descriptive material about the students already in regional institutions can help in predicting enrollment patterns in future regional institutions.

POTENTIAL DEMAND

The potential number of students in colleges and universities in the future is large, as the current rates of college participation indicate. We can expect that the groups now effective in their demands for higher education will continue to participate, probably at a slowly increasing rate and, even more importantly, that a larger potential may be tapped by several different policy approaches. Indeed, many potential students who at present are not enrolled in any college or university would be served best by post-secondary vocation and technical training or by commuter-oriented educational institutions. Part II will discuss this potential.

The major portion of Part II includes projections of enrollment in higher education using five different educational systems. These systems are intended as illustrations rather than as predictions. In fact, we feel it most likely that regional higher education in the state will be expanded through the present extensive structure of public regional institutions (System 1). The other systems vary in the projected number and type of additional public institutions. For this reason some specific locations will be designated because the local market obviously depends upon the locality. The systems encompass vocational studies, additional regional campuses in new locations, public two-year institutions in some the major metropolitan areas that already have a public university or college, and a combination of these. The final system includes 20 new two-year institutions located throughout the state: 11 in new locations and 9 in locations that already have a public institution. The various systems take into consideration the increase in total college enrollment and the shifts away from present institutions that would result from additional institutions.

POTENTIAL COSTS AND OBJECTIVES

None of the future programs for postsecondary education in Indiana will be developed without cost. In fact, this report is only part of a study that will help to estimate future post-high school education costs under various systems, and no calculation of these costs will be made in this study. In addition, since the different educational systems will affect the quality of the state's educational system differently, care should be taken to consider quality as well as quantity. Finally, alternative systems will emphasize certain goals and necessarily neglect others which conflict. The goals chosen will influence greatly the students who will be served in the future.

Although no policy recommendations are made, it is hoped that a more enlightened policy can be formed from an understanding of the enrollment impacts that are discussed in this study. We hope that the details of the projections will be the basis for further discussion and improvement of available data on students' interests and needs.

II. EFFECTIVE DEMAND

As noted in the introduction, the term effective demand refers to those students who have been effective in their demand for higher education and are presently enrolled in a college or university. In this report we are especially interested in county differences in effective demand.

This chapter will include data from a census of college freshmen made in the fall of 1968 and a survey of high school seniors conducted in February, 1969. Both surveys provide information by county, which is essential in analyzing geographic differences in demand. Unfortunately, the results of both studies became available very late in the preparation of the present report. For this reason, the results could not be thoroughly analyzed or incorporated in this report. However, the information most pertinent to regional differences is presented. Those especially interested in county data should consult Appendixes A and B.[1]

PARTICIPATION RATES

In 1965-66 almost 35 percent of the high school graduates in the nation entered college the same year they graduated from high school. An estimated 46 percent, or 1.2 million, will enter within five years of graduation.[2]

Similar statistics for Indiana are difficult to develop because to do so requires a long-term follow-up study. Although the 1968 census of freshman students provides the basis for a comparison, state-by-state comparisons or the evaluation of a state system by comparison with the national average is still risky. One big problem is the necessity of obtaining student migration data. Since the most recent migration study of Indiana students attending college out of state was made in 1963,[3] migration estimates must be made to ascertain total college attendance.

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[1] Further information on the 1968 college freshman census is available from Thomas M. Elliott, Report of the 1968 Indiana Freshman Student Census, Research Report RCCC 69-1 (Bloomington, Ind.: Regional Campus Coordinating Committee, May 26, 1969). The 1969 high school senior census will be reprinted in more detail in a forthcoming publication.

[2] U.S. Department of Health, Education, and Welfare, Toward a Long-Range Plan for Federal Financial Support for Higher Education, a report to the President (Washington, D.C.: U.S. Govt. Printing Office, January, 1969), p. 5.

Indiana Freshmen as a Measure

The ratio of 1968 Indiana freshmen in Indiana institutions to high school graduates the previous June was 55.21 percent according to the 1968 freshman census. Migration of Indiana freshmen to out-of-state colleges was estimated at 19.7 percent of Indiana freshmen in Indiana institutions, resulting in a final estimate of 46,621 Indiana freshmen in and out of the state in the fall, 1968. This total number of Indiana freshmen represents 49.99 percent of the births in Indiana 18 years before and is 66.08 percent of the estimated number of Indiana high school graduates in June, 1968.[4] If 66 percent of these

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[3] National Center for Educational Statistics, Office of Education, U.S. Department of Health, Education, and Welfare, Residence and Migration of College Students, Fall 1963: State and Regional Data (Washington, D.C.: U.S. Govt. Printing Office, 1965).

[4] Report of the 1968 Indiana Freshman Student Census, p. 8. Note that high school graduate figures were estimated from data on enrollment in the twelfth grade. For details on the out-migration calculation, see Appendix A. Most of the 1968 freshmen census references come from Report of the 1968 Indiana Freshman Student Census or from unpublished data provided to us by the author of that report. A later report of the census provides additional detail and some modification of the data. Specifically, the second report classifies Vincennes University as a main campus of a public university and the Eastern Indiana Center at Earlham College as a regional campus. Although this report did not become available until the publication time of the present study, an attempt has been made to use the revised data. See Thomas M. Elliott, College Attendance in Indiana: The Report of the 1968 Indiana Freshman Student Census, Research Report RCCC 69-72 (Bloomington, Ind.: Regional Campus Coordinating Committee, August 4, 1969).

Indiana freshmen in the fall of 1968 graduated from high school in June, 1968, as the census indicates, then almost 44 percent of the 1968 Indiana high school graduates were in college the following year.[5] This last percentage may be compared with the 1965 national average of 35 percent.

Some summary data from the 1968 census, along with figures from a 1960 census, are presented in Table 1. This table shows an eight-year increase of 70.5 percent in the number of Indiana residents who were freshmen in college. The table is also of interest because it details the various measures that can be used to indicate participation rates. The table relates Indiana freshmen both to Indiana births and Indiana high school graduates. The figure of total freshmen in Indiana institutions (including students from outside Indiana) compared to Indiana births has often been used in the state to project enrollment trends. In 1968 all freshmen in Indiana institutions constituted 50.5 percent of the Indiana births occurring 18 years previously. This figure is surprisingly close to the estimate of Indiana freshmen in Indiana and out-of-state institutions (49.99 percent of Indiana births).

In this report we are especially interested in regional or county differences in college attendance, or participation rate. Appendix A presents the Indiana counties in 1968 and ranks them by several different measures. Thomas Elliott chose the measure of Indiana freshmen in Indiana institutions as a percent of high school graduates the previous June as the most appropriate one for his study. (This measure is detailed in Appendix A , and further discussion of the 1968 census unless otherwise indicated is presented in

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[5] The number of freshmen in 1968 that had graduated from high school in the immediately preceding year was 66 percent, down from 68.5 percent in the 1960 freshman census. Surprisingly, 13.7 percent had graduated more than five years previously, a gain of almost 5 percent from 8.9 percent in 1960. ". . . Public universities' regional campuses had especially high percentages of their freshmen who graduated more than five years prior to the census in 1968." College Attendance in Indiana, p. 26.

TABLE 1

Gross Comparison of the Data on Indiana Resident Freshmen from 1960 and 1968 Freshman Student Censuses

	1960	1968	8-Year Percentage Increase
1. Indiana births 18 years previous (1942 and 1950)	73,706	93,256	26.5%
2. Indiana high school graduates	50,284	70,551[a]	40.3
3. High school graduates as a percent of births	68.22%	75.65%	7.4
4. Estimated no. of Indiana residents who were freshmen in Indiana institutions	22,843[b]	38,948[c]	70.5
5. Estimated no. of Indiana residents who were freshmen in college everywhere	27,343[d]	46,621[d]	70.5
6. Resident freshmen in Indiana institutions as a percent of births	30.99%	41.76%	10.8
7. Resident freshmen in college everywhere as a percent of births	37.10%	49.99%	12.9
8. Resident freshmen in Indiana institutions as a percent of high school graduates	45.43%	55.21%	9.8
9. Resident freshmen in college everywhere as a percent of high school graduates	54.38%	66.08%	11.7

[a] Estimated from twelfth grade enrollments.
[b] Estimated from an 85.5 percent sample.
[c] Estimated from a 91.8 percent sample.
[d] See Appendix A for explanation of these estimates.

SOURCE: Report of the 1968 Indiana Freshman Student Census, p. 19.

terms of this measure.) This appendix also shows 1960 rates to be used for comparison and indicates the percentage of freshmen from each county attending public institutions. Furthermore, Appendix A shows county participation rates with the adjustment of a constant out-migration percentage applied to each county. Extremely high participation is implied for some of the counties already ranked highest. For example, this adjustment implies that 91.3 percent of Monroe County high school graduates attend college either in Indiana or out of state. The 1969 survey of high school seniors' plans provides detail on county differences in the tendency to attend college out of state. (See Appendix B.) However, data from more than one year are necessary to predict these variations accurately.

Some of Elliott's comments, taken directly from the Regional Coordinating Committee report on the 1968 census, are helpful in summarizing the county data.

> The median county attendance rate in 1968 was found to be 46.53%, compared with 33.97% in 1960. That both figures are noticeably lower than the state-wide attendance rates may be easily explained. In 1968, the eighteen counties ranking highest in percentage attendance rate (19.6% of the total number of counties) were reported as the county of residence for over fifty per cent of the Indiana resident freshmen. In 1960, an even fewer number of counties (those with the ten highest attendance rates) were reported as the origin of over fifty per cent of the Indiana resident freshmen so enrolled. Eight of those ten counties remained among the top eighteen counties in 1968.
>
> The relative rankings for the two years for which data were available displayed considerable variance. When the rankings were correlated by the Spearman Rho rank order correlation method, however, the relationship was found to be statistically significant at the .01 level of confidence. (Footnote: The significance of this relationship may be spurious, for the Spearman Rho is not considered by some experts to be

sufficiently sensitive when n is greater than 30. (Here n = 92 counties).[6]

In 1960, 48.2 percent of all Indiana residents who were freshmen in Indiana institutions were enrolled on the main campuses of the state universities, and in 1968, this percentage was 50.8 percent. The percentage of Indiana freshmen attending regional campuses grew from 24.9 percent to 34.2 percent, or 13,929 students in 1968. The remainder attended private institutions in Indiana.

The representation of each of the 92 counties by the percentage of high school students who were freshmen in Indiana institutions varied considerably. The difference between the highest and lowest participation rate in 1968 was 49.26 percentage points (however, the comparable figure for 1960 was 58.50 percentage points).[7] For example, the ratio of freshmen to high school graduates for Monroe County was over 76 percent (without adjusting for out-migration), but Switzerland County had a ratio of only 27 percent.

It is very difficult to generalize about differences created by numerous interrelated influences. However, Elliott presents two interesting comparisons, which will now be discussed. Table 2 shows the freshman participation rates divided by size of county. The 25 counties that are standard metropolitan statistical areas (SMSA's) have the highest average 1968 participation rate, 57.45 percent. Exactly half of all the Indiana counties are defined as urban, which means that they are either located in an SMSA or contain a city with a population over 10,000. In 1968 these urban counties had an

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[6] Report of the 1968 Indiana Freshman Student Census, pp. 20-24.

[7] Report of the 1968 Indiana Freshman Student Census, p. 24.

TABLE 2

Attendance Rates for Counties Grouped by Degree of Urbanization, Fall, 1960 and Fall, 1968

		1960			1968		
County Type	No. of Counties	H.S. Grads.	Fresh.	Percent	H.S. Grads.	Fresh.	Percent
Counties within an SMSA	(23)	28,973	14,776	51.00%	43,368	24,914	57.45%
Counties containing a city with a pop. over 25,000, not in an SMSA	(6)	4,791	2,221	46.36%	7,043	3,796	53.90%
Counties containing a city with a pop. 10,000 to 25,000, not in an SMSA	(15)	6,125	2,279	37.21%	7,588	3,650	48.10%
Total urban	(46)	39,889	19,276	48.32%	57,999	32,360	55.79%
Northern rural counties	(22)	5,574	1,961	35.18%	6,879	3,217	46.77%
Southern rural counties	(24)	4,821	1,052	31.51%	5,870	2,306	39.28%
Total rural	(46)	10,395	3,463	33.31%	12,749	5,523	43.32%
Total Indiana	(92)	50,284	22,843	44.95%	70,551	38,948	55.21%

SOURCE: College Attendance in Indiana, p. 33.

average participation rate of 55.79 percent, as compared with 43.32 percent for rural counties. Furthermore, when rural counties are divided into north (north of Marion County) and south, the 22 northern rural counties average a participation rate of 46.77 percent, while the 24 southern rural counties average 39.28 percent. Of course, many factors that influence college attendance (such as income levels, parents' education level, quality of secondary schools, and accessibility to colleges) are related to degree of urbanization.

Elliott also examined the effect of the presence of an institution of higher education within a county on that county's college participation rate. A summary of his findings is shown in Table 3. However, in Indiana this kind of comparison involves substantial problems. Three of the public universities and many of their regional campuses are located in an SMSA, and SMSA's, as we have just noted, have the highest participation rates. Furthermore, the regional campuses are located in the largest metropolitan areas of the state (for example: Marion, Allen, and Lake counties) and show higher participation rates than the counties containing state universities. While the five counties with a state university (including Vincennes University) had an average ratio of freshmen to high school graduates of 55.6 percent, the nine counties with a public regional campus show a ratio of 61.7 percent.

TABLE 3

Percent of High School Graduates Who Were Freshmen in Indiana Institutions of Higher Education, by Counties Classified According to the Presence of Such Institutions Within the County, Fall, 1960 and Fall, 1968

	Attendance Rates 1960	Attendance Rates 1968	Difference
5 counties containing a public institution main campus	51.3%	55.6%	+4.3
9 counties containing one or more public regional campuses	55.8	61.7	+5.3
16 counties containing one or more private institutions, not included above	41.3	46.7	+5.4
62 counties containint no institution studied	33.1	45.8	+12.7
Total Indiana (92 counties)	45.4	55.2	+9.8

SOURCE: College Attendance in Indiana, p. 37.

The six counties that contain both a regional campus and one or more private universities or colleges cause some difficulty. Elliott shows that ratios of the 16 counties containing one or more private institutions and the 62 counties with no institutions are both below the state average. As he notes, however, the data are not pure because the counties that contain both a regional campus and a private institution (Marion, Lake, Allen, St. Joseph, Vanderburgh, and Wayne) are included only as having regional campuses.

Obviously, generalizing county differences in college participation is difficult. We will discuss this point shortly and attempt once more to isolate the influence of local institutions on county enrollment rates. First, we will present a different measure of county variation that includes all undergraduates rather than freshmen only. This measure will allow some comparison with the 1968 freshman census data.

Undergraduates as a Measure

Table 4 presents county undergraduate participation rates in rank order based on a ratio of total 1967-68 undergraduates in Indiana institutions from the county to the 18-21 age group based on county births. Although the use of this age group to gauge college participation is common, some disadvantages appear when this measure is compared with the rates computed on the basis of high school graduates. Even if the group born 18 to 21 years previously did not change in size, there are county differences in the percentage of youths who continue in high school until graduation and who are therefore eligible to attend college. (That is, there are, without doubt, differences in the number of dropouts.)

TABLE 4

College Participation Rate* of 18-21 Year Age Group, by County 1967-68

County (Region)+	1967-68 Undergrads. % 18-21 Yr.	Rank	1950-60 Net Migration‡	County (Region)+	1967-68 Undergrads. % 18-21 Yr.	Rank	1950-60 Net Migration‡
Top One-Third							
Porter (1)	52.7	1	3.1	Clay (7)	28.4	16	-0.6
Hendricks (8)	51.5	2	3.6	Boone (8)	28.2	17	0.4
Monroe (10)	50.5	3	---	Wabash (5)	27.1	18	-0.1
Hamilton (8)	38.4	4	2.1	Morgan (8)	26.7	19t	1.8
Johnson (8)	37.8	5	3.2	St. Joseph (2)	26.7	19t	-0.2
Vanderburgh (12)	33.4	6	-1.1	Putnam (7)	26.3	21t	-0.1
Hancock (8)	33.3	7	1.1	Howard (5)	26.3	21t	0.6
Marion (8)	31.5	8	0.6	Delaware (6)	26.1	23	0.4
Tippecanoe (4)	31.3	9	-0.1	Brown (10)	25.8	24	0.4
LaPorte (1)	30.9	10	0.6	Fulton (5)	25.5	25t	-0.6
Vigo (7)	30.8	11	-0.6	Allen (3)	25.5	25t	0.4
Lake (1)	30.6	12t#	1.1	Wells (3)	25.2	27t	-0.3
Bartholomew (10)	30.6	12t	0.8	White (4)	25.2	27t	-0.3
Kosciusko (2)	29.8	14	0.8	Benton (4)	25.1	29	-0.9
Newton (1)	29.2	15	-0.6	Cass (5)	24.7	30t	-0.4

(continued)

County (Region)+	1967-68 Undergrads. % 18-21 Yr.	Rank	1950-60 Net Migration‡
Dubois (12)	24.7	30t	-0.5
Middle One-Third			
Marshall (2)	24.6	32t	-0.4
Montgomery (4)	24.6	32t	-0.2
Warrick (12)	24.2	34	-0.4
Gibson (12)	24.1	35t	-1.2
DeKalb (3)	24.1	35t	-0.3
Huntington (3)	23.8	37	-0.4
Madison (6)	23.4	38	0.4
Knox (12)	23.2	39	-1.2
Elkhart (2)	22.9	40	0.6
Whitley (3)	22.7	41	-0.4
Clinton (4)	22.6	42	-0.7
Shelby (8)	22.5	43t	0.6
Clark (13)	22.5	43t	0.6
Steuben (3)	22.4	45t	-1.1
Greene (7)	22.4	45t	-1.1
Grant (6)	22.4	45t	0.4
Vermillion (7)	22.3	48t	-1.5
Tipton (5)	22.3	48t	-1.0
Posey (12)	22.3	48t	-1.3
Daviess (12)	22.3	48t	-1.1
Sullivan (7)	21.9	52	-1.2
Wayne (9)	21.6	53	-0.6
Parke (7)	21.5	54	-1.2
Miami (5)	21.3	55	1.7
Spencer (12)	20.8	56	-1.0
Randolph (6)	20.7	57t	-0.5
Carroll (4)	20.7	57t	-0.5
Noble (3)	20.6	59	0.1
Rush (9)	20.4	60	-0.7
Adams (3)	20.3	61	-0.7
Warren (4)	20.2	62	-0.8
Bottom One-Third			
Jackson (10)	20.1	63	-0.6
Decatur (10)	19.9	64	-0.3
Union (9)	19.1	65	-0.8
Fountain (4)	19.0	66	-0.5

County (Region)+	1967-68 Undergrads. % 18-21 Yr.	Rank	1950-60 Net Migration	County (Region)+	% 18-21 Yr.	Rank	1950-60 Net Migration
Henry (9)	18.7	67	-0.7	Floyd (13)	16.1	80t	-0.1
Pulaski (1)	18.4	68	-1.0	Martin (12)	15.9	82	-1.5
Jasper (1)	18.3	69	-0.6	Jennings (11)	15.8	83	0.1
Franklin (9)	18.2	70	-0.7	Dearborn (11)	15.7	84t	-0.1
Owen (7)	18.0	71t	-0.7	Lawrence (10)	15.7	84t	-0.6
Jefferson (11)	18.0	71t	-0.1	Perry (12)	15.7	84t	-1.5
Ripley (11)	17.8	73	-0.3	Crawford (13)	14.9	87	-1.4
Harrison (13)	17.6	74	-0.4	Scott (13)	13.6	88t	0.2
Starke (1)	17.4	75	-0.1	Orange (13)	13.6	88t	-1.0
Pike (12)	17.2	76	-1.9	LaGrange (3)	11.2	90	-0.4
Jay (6)	17.0	77	-1.1	Ohio (11)	9.7	91	-1.0
Fayette (9)	16.9	78	-1.0	Switzerland (11)	7.6	92	-1.3
Blackford (6)	16.8	79	-0.7				
Washington (13)	16.1	80t	-0.5	Total State	27.1%		0.1

*College participation rate includes total undergraduates from Indiana county enrolled in any Indiana institution in 1967-68 as a percent of the births in that county 18 to 21 years previously. (Note that no adjustment has been made for other Indiana students who attend college out of state.)

+Region of the state as defined by Indiana Vocational Technical College (see Appendix B for map).

‡Net migration includes the number of net migrants divided by the number who could have migrated.

#t = tie in rank position.

SOURCES: Enrollment data and county births are taken from Nelson Parkhurst and Betty Suddarth, "Potential Enrollment for Indiana Colleges and Universities 1968 to 1985," Higher Education in Indiana, Current Status Report 2 (Bloomington, Ind.: Indiana Commission on Academic Facilities, 1968).

Migration data: Bureau of Business Research, Indiana University, "Indiana Population Projections 1965-1985," Volume I (Bloomington, Ind.: Bureau of Business Research, September, 1966) Appendix D. For 1960-68 migration, see Division of Public Health Statistics, Release P2 (Indianapolis: Indiana State Board of Health, April 30, 1969).

A more serious drawback in the statistic, however, is that migration of this age group may significantly change the total age group within a county, and such changes will not be reflected in the statistics based on birth rates.[8] In fact, in-migration of youths significantly improves the rank position of some of the counties. Porter (1), Hendricks (2), Hamilton (4), Johnson (5), and Hancock (7) all had net in-migration into the county over 0.5 percent in both the 1950-60 and 1960-64 periods.[9] Although data on migration by the specific age group mentioned are not available, the effect on rank position is obvious when the top counties are observed. For Porter County, for example, Elliott estimated that there were 1115 high school graduates in June, 1968. However, only 734 babies were born in Porter County in 1950, 18 years previously.[10] In Hendricks County, there were 731 high school graduates in 1968, compared with 524 births 18 years previously. These counties with large in-migration, therefore, are ranked considerably higher than would be expected when birth rates are used. However, not all the counties experienced such heavy migration. In fact, some of the top-ranked counties experienced net out-migration. Table 4 provides a rough measure of the migration effect by showing the net migration for the counties between 1950 and 1960. The majority of counties experienced out-migration, and for the entire state, migration resulted in a population increase of only 0.1 percent. When these facts are kept in mind, Table 4 is helpful in examining further county variations when all undergraduates are considered.

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[8] Table 4 was not based on high school graduates because of the difficulty in obtaining data on the size of high school graduating classes in Indiana. Data in the 1968 freshman census are based on an estimate of high school graduates made by the application of a constant historical percentage rate to information on enrollment in the twelfth grade, as reported by the State Superintendent of Public Instruction.

[9] This net migration figure is for the entire county population and is not age specific. The figure in parenthesis represents the county participation rate rank position. See Indiana Population Projections 1965-1985 (Bloomington, Ind.: Bureau of Business Research, September, 1966), Appendix D, "Migration Rates."

[10] Similar comparisons can be made for any county by examining the tables in Appendix A.

Table 4 shows the wide range of percentages that occurred among the counties in the percentage of 18-21 year olds who were undergraduates. The highest percent was over 50 percent, and the lowest was 7.6 percent. In 1967-68, 27.1 percent of the persons born in Indiana 18 to 21 years previously were enrolled as undergraduates in Indiana institutions.

Figure 1 indicates the county participation rates, and Table 5 shows the average of county undergraduate participation rates by region.[11] As Table 5 indicates, the Indianapolis region (8), which includes several counties with large in-migration rates, had the highest average, 33.7 percent. The lowest average (14.1 percent) was found in Region 11, which is located in the southeastern corner of the state near Cincinnati.[12] It is possible that many of the youths in this region attend college in Ohio. In addition, this region of Indiana has only one private college and is the only region of the state without a main or regional campus of the public universities.

One further county comparison was made using the undergraduate participation rates presented in Table 4. The participation rates of counties of differing income levels were determined, and the results are shown in Table 6. The income figures used were for 1966 average disposable household income (DHI) estimates by county, as reported by the 1967 "Survey of Buying Power."[13]

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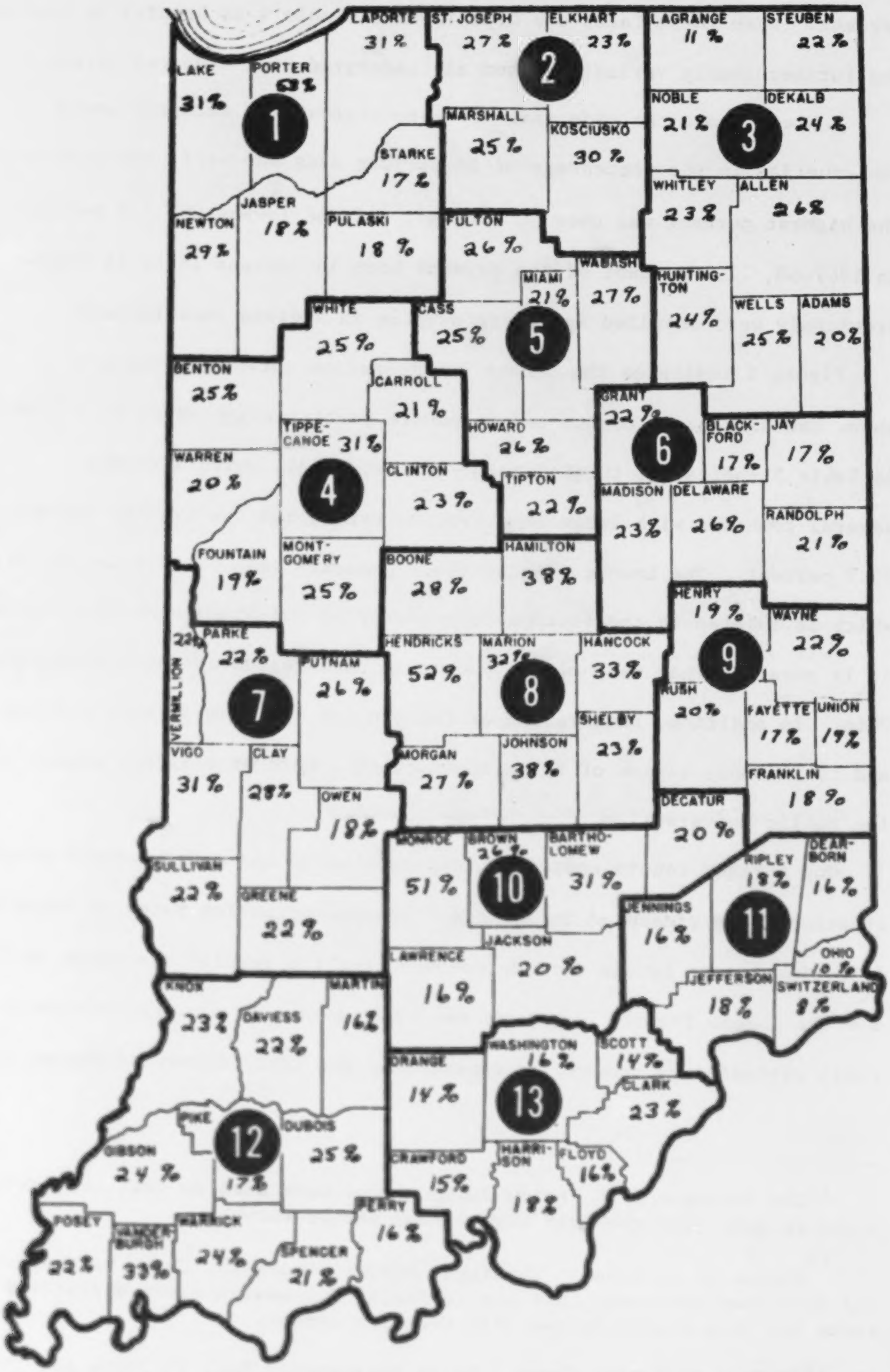
[11] The footnote IVTC region designations were used so that comparisons might be made with the 1969 high school senior survey.

[12] Region 11 includes: Jennings, Ripley, Dearborn, Ohio, Switzerland, and Jefferson counties. See the following discussion about variations in ranks for this region in the 1968 freshman census.

[13] "Survey of Buying Power," Sales Management, Vol. 71 (June 10, 1967).

FIGURE 1

Percentages of Indiana Youths Born 18-21 Years Previously Who Attend Indiana Institutions of Higher Education, 1967-68


LAPORTE 31%
ST. JOSEPH 27%
ELKHART 23%
LAGRANGE 11%
STEUBEN 22%
LAKE 31%
PORTER
1
2
MARSHALL 25%
KOSCIUSKO 30%
NOBLE 21%
DEKALB 24%
3
STARKE 17%
WHITLEY 23%
ALLEN 26%
NEWTON 29%
JASPER 18%
PULASKI 18%
FULTON 26%
MIAMI 21%
WABASH 27%
HUNTINGTON 24%
WELLS 25%
ADAMS 20%
WHITE 25%
CASS 25%
5
BENTON 25%
CARROLL 21%
GRANT 22%
TIPPECANOE 31%
HOWARD 26%
6
BLACKFORD 17%
JAY 17%
WARREN 20%
4
CLINTON 23%
TIPTON 22%
MADISON 23%
DELAWARE 26%
RANDOLPH 21%
FOUNTAIN 19%
MONTGOMERY 25%
BOONE 28%
HAMILTON 38%
HENRY 19%
WAYNE 22%
VERMILLION 22%
PARKE 22%
PUTNAM 26%
7
HENDRICKS 52%
MARION 32%
8
HANCOCK 33%
9
RUSH 20%
FAYETTE 17%
UNION 19%
SHELBY 23%
VIGO 31%
CLAY 28%
MORGAN 27%
JOHNSON 38%
FRANKLIN 18%
OWEN 18%
DECATUR 20%
MONROE 51%
BROWN 26%
10
BARTHOLOMEW 31%
RIPLEY 18%
DEARBORN 16%
SULLIVAN 22%
GREENE 22%
JENNINGS 16%
11
JACKSON 20%
LAWRENCE 16%
OHIO 10%
JEFFERSON 18%
SWITZERLAND 8%
KNOX 23%
DAVIESS 22%
MARTIN 16%
WASHINGTON 16%
SCOTT 14%
ORANGE 14%
13
CLARK 23%
PIKE
12
DUBOIS 25%
GIBSON 24%
17%
CRAWFORD 15%
HARRISON 18%
FLOYD 16%
PERRY 16%
POSEY 22%
VANDERBURGH 33%
WARRICK 24%
SPENCER 21%

SOURCE: Nelson Parkhurst and Betty Sudderth, "Enrollment Projections," *Higher Education in Indiana,* Current Status Report 2 (Bloomington, Ind. The Indiana Advisory Commission on Academic Facilities).

TABLE 5

Average Undergraduate Participation Rates by IVTC Region, 1967-68

Indiana Region	Participation Rate Average	Rank
1	28.2	2
2	26.0	4
3	21.8	9
4	23.6	7
5	24.5	5
6	21.1	10
7	24.0	6
8	33.7	1
9	19.2	11
10	27.1	3
11	14.1	13
12	22.8	8
13	16.3	12

SOURCE: Derived from Table 4. Regions as defined by Indiana Vocational Technical College.

The counties were divided into three DHI groups: those above an average of $8,500; those below $7,500; and those between $7,500 and $8,500. As expected, higher participation rates were most predominant in those counties with the highest income level, and lower rates were found in those counties with a lower income level. For example, 66 percent of those counties in the high-income group had participation rates of 25 percent or above; only 3 percent of the counties in the lowest income group had high participation rates. Within this low-income group, 52 percent of the counties had participation rates below 20 percent.

Income level is only one of the many factors that influence county differences in participation rate. In this set of tables we hypothesized that within a county the presence or absence of an institution of higher education (public or private) could explain more variation than income levels alone. However, our results show that such an influence is difficult to isolate. Nevertheless, to obtain a more precise test of this hypothesis, test factor standardization was applied to the data in Table 6.[14]

This standardization technique, long used in demographic research, provides a summary measure of what participation rates would be if the presence of a college or university were constant. In other words, it is possible to see what the relationship between income and participation rates would be if the counties were equalized in terms of the test factor, the presence of an institution of higher education. The reason for using this technique is to show clearly whether, and to what extent, the original relationship is reduced by controlling the test factor.

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[14] For a more detailed discussion of the procedural steps followed in test factor standardization, see Morris Rosenberg, "Test Factor Standardization as a Method of Interpretation," Social Forces, Vol. 40 (October, 1962), pp. 53-61.

TABLE 6

Original Relationship of Counties According to Percentage of 18-21-Year-Olds Attending College

Percentage of County Attending College*	Percent of Counties			High-Low Difference
	D.H.I. Level+ Above $8,500	D.H.I. Level $7,500-8,500	D.H.I. Level Below $7,500	
25% or above	65.6%(21)‡	22.6%(7)	3.5%(1)	62.1%
20-25%	31.3 (10)	35.5 (11)	44.8 (3)	
Below 20%	3.1 (1)	41.9 (13)	51.7 (15)	48.6
Total Percentage	100.0	100.0	100.0	
Number	32	31	29	

* Percentages attending college computed from figures reported in Parkhurst and Suddarth, "Enrollment Projections." See Table 4.

+ 1966 DHI figures taken from "Survey of Buying Power," Sales Management, Vol. 101 (June 10, 1967).

‡ Number of counties.

TABLE 7

Standardized* Relationship of Counties According to Percentage of 18-21-Year-Olds Attending College and Level of 1966 D.H.I.

Percentage of County Attending College	Percent of Counties			High-Low Percentage Change
	D.H.I. Level Above $8,500	D.H.I. Level $7,500-8,500	D.H.I. Level Below $7,500	
25% or above	62.5%	22.6%	2.6%	59.0%
20-24.9%	32.1	36.3	59.0	
Below 20%	5.3	41.1	38.4	33.1
Total Percent	100.0	100.0	100.0	

* The presence of a higher education institution within a county was used to standardize the relationship.

This method enabled us to produce a simple standardized table (Table 7), which easily can be compared with the original table (Table 6). In the original relationship, the counties in the highest income group were 62.1 percent more likely to have a high participation rate (25 percent or above) than the counties in the low income group. In the standardized table, this difference is 59.0 percent. Also, in the original relationship, the counties in the low income group are 48.6 percent more likely than the counties in the high income group to have a participation rate below 20 percent. In the standardized relationship this difference is reduced to 33.1 percent. Those counties falling into the middle DHI group were more evenly distributed between high, medium, and low participation rates, and the standardization caused no significant changes in these proportions. The results of this test, however, indicate that the presence of a college or university in a county does, to some extent, contribute to a higher participation rate.

The standardization technique could be used for many other factors. Other gross county characteristics, such as median level of education, occupational level, or quality of the primary and secondary public schools, might be used to further isolate influences on county participation rate. However, the data probably do not warrent such sophisticated manipulation. Little information is available on out-of-state college attendance, and it is difficult to estimate the net migration of the relevant age group. A comparison of the undergraduate participation rates presented in Table 4 with the comparable statistics from the 1968 freshman census suggests even further difficulties.

Comparison of the Two Measures

It would seem reasonable to compare freshmen participation (based on births 18 years earlier) with undergraduate participation (based on births that occurred 18 to 21 years previously). We might expect higher freshman participation than undergraduate participation in the counties where there are regional campuses that offer primarily freshman and sophomore courses. Table 8 compares these two groups, but no simple conclusion emerges. Indeed, several wide variations appear among the rankings. In the counties with regional campuses, most of the freshman and undergraduate rates are similar or favor freshman participation. However, it is difficult to explain differences in ranks such as those that occur for Vanderburgh or Vigo counties in terms of type of institution available.

In examining Elliott's data, we noticed that Region 11, which has the lowest average undergraduate participation rate, has several counties with rather high freshman participation rates. Dearborn County, which ranked eighty-fourth in undergraduate participation (with 15.7 percent undergraduates to 18-21 age group), is ranked twenty-fourth in the freshman census (with 41 percent freshmen to 18-year-olds). Jennings County, which ranked eighty-third by undergraduate participation, ranks eighth in the freshman census, with 50.9 percent of those born 18 years previously as freshmen in Indiana institutions in 1968.[15] Although the two sets of figures report enrollment for different years, one year should not make such a difference nor should the inclusion of all undergraduates create such wide variation in ranking. In fact, the difference seems to be created by the number of students reported from these counties. Jennings County, for example, reported 138 freshmen in 1968, compared with 181 total undergraduates

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[15] See Appendix A for data from 1968 freshman census.

TABLE 8

Comparison of Freshmen to 18-Year-Olds and Undergraduates to 18-21 Age Group for Counties with Public Institutions of Higher Education

Counties Containing State Universities	1968 Rank According to Fresh. Participation	1967 Rank According to Undergrad. Participation
Delaware	41	23
Monroe	10	3
Tippecanoe	23	9
Vigo	56	11
Counties Containing Regional Campuses		
Allen	5	25
Clark	19	43
Howard	7	21
Lake	13	12
LaPorte	12	10
Marion	14	8
St. Joseph	25	19
Vanderburgh	45	6

SOURCE: Table 4 and Appendix A.

reported in the fall, 1967. Dearborn County shows 256 freshmen and only 313 undergraduates the previous year. No such explosion of the freshman class seems likely. Neither Elliott nor we have been able to resolve this disparity. The only difference in the enrollment statistics is that the 1968 freshman census was collected from a questionnaire administered to students at registration and the undergraduate enrollment figures were reported by the institutions to Nelson M. Parkhurst, Registrar of Purdue University, in connection with the Indiana Higher Education Facilities Comprehensive Planning Study.[16]

What a comparison of the two studies does suggest is the need for county enrollment data for a series of years so that trends might be examined. In addition, it suggests that extreme caution should be used in drawing conclusions from the presently available statistics on county variations in participation rate.

In conclusion, we wish to note that even if a thorough record of county participation rates were available, an examination of the individual students involved would still be necessary. Obviously, averages do not show the distribution of various influences in the county. This difficulty is apparent when we view the college attendance trends of counties that are considered urban areas but that include rural sections, exurbia, suburbia, and probably a portion of the low-income ghetto. Furthermore, college attendance is difficult to predict even when individual student characteristics are considered. A Minnesota study, noting "the factor of fortuity," observed:

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[16] Nelson M. Parkhurst and Betty Suddarth, "Potential Enrollment for Indiana Colleges and Universities, 1968 to 1985," Higher Education in Indiana, Current Status Report 2 (Bloomington, Ind.: The Indiana Advisory Commission on Academic Facilities, 1968).

> A statistician who looked at the research on the decision of high school graduates concerning post-high school plans would decide that to date no more than 50 percent of the influences determining these plans have been accounted for or identified. Knowledge of the abilities, family backgrounds, socio-economic conditions, schools, and personality variables of high school graduates predict college attendance no more than would be indicated by a multiple correlation coefficient of .70. This limited knowledge is due to two things, first, the inadequacy and incompleteness of our methods of observation, measurement, and analysis, and second, the fortuitous nature of the behavior with which we are concerned. Many decisions of high school graduates are influenced by accidental factors.[17]

Furthermore, the Minnesota study reviewed a number of previous studies of some of the factors influencing college attendance. Some of these reviews are presented below.

> When the studies are considered together and one examines the relationships found between the variables studied and college attendance, one is immediately impressed by the almost completely positive results reported. Each of the studies that analyzed sex differences found differences. Each of the studies that examined relationships between ability and post-high school plans found relationships. Every study but one, and that one studied a very homogeneous sample, on the relationship between economic status and plans found a relationship. Each study analyzing the influence of cultural level found a difference. All but one of the studies examining the influence of where the student lived found a relationship. Consistently the studies found a relationship between the size of the high school and post-high school plans and almost as consistently the few studies that analyzed the relationship of plans and personality variables found a significant relationship. Apparently investigators either have excluded in their studies variables not related to post-high school plans or they have failed to report negative results.
>
> The almost complete agreement found for these relationships regardless of variables examined is not surprising when one considers that the variables, themselves, are highly intercorrelated. The sex variable is perhaps the only one that does not have at least a moderate relationship with the other indices. Ability, economic level, cultural level, and area from which the student comes all seem to be related .... Simple, first-order relationships between these variables and the plans of students would all tend to be in the same direction.
>
> A few studies have attempted to analyze interactions, that is, when one holds ability constant, what does this do with the relationship between economic status and post-high school plans? In general when such analyses have been made, the size of the observed relationships tends to diminish,

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[17] Ralph F. Birdie and Albert B. Hood, "Trans and Post High School Plans Over an 11-Year Period," Cooperative Research Project 951 (Minneapolis: Student Counseling Bureau, University of Minnesota, 1963), p. 147. This project was supported by the U. S. Department of Health, Education, and Welfare.

> but the significance remains. For example, when in these studies one compares students who are planning to attend college and those who are planning otherwise on the basis of ability and economic status of the family, large and significant differences are found. When one takes groups of students planning to attend college and planning otherwise, but matched on the basis of economic status, one still finds a relationship between ability and post-high school plans, although this relationship tends to be different from the relationship observed with the total group desregarding economic status.[18]

These quotations suggest that while we may find many factors related to county differences in college participation, we must significantly improve our data before we can "explain" these differences.

PROFILE OF HIGH SCHOOL SENIORS' PLANS

A survey of Indiana high school seniors in the first months of 1969, conducted by Indiana Vocational Technical College with cooperation from the Indiana Higher Education Facilities Comprehensive Planning Study, provided information useful in detailing the college plans of Indiana youths. Several aspects pertinent to the subject of regional demand and regional differences will now be surveyed.

The survey provided an opportunity to collect data on students' socio-economic characteristics, although unfortunately a written questionnaire does not lend itself to the collection of precise detail about family income or college financing plans. Results of the survey were tabulated by region of the state and by county, so that geographic differences are easily examined. Although the county data might provide an interesting source for analysis of county differences in college participation (for example, college plans compared to county income or median education level), no such analysis has been attempted. The most pertinent county data, however, are included here for those interested in examining interregional and intraregional differences.

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[18] "Trans and Post-High School Plans Over an 11-Year Period," p. 4.

Tables 9-14, which are presented at the end of this chapter, report the respondents' after-high school plans and college plans. These intentions are reported by sex, high school grade average, region, occupation or education of the head of the household, and size of community of residence. Table 14 shows the characteristics that might be expected of the 1969 freshman class on main and regional campuses of the state universities and in vocational schools--that is, if the senior respondents are representative of the total freshmen population. The after-school and college plans of seniors are reported by county in Appendix B (Tables B-2 and B-3). In addition, Appendix B (Table B-1) includes detail on such selected regional characteristics of the senior respondents as occupation and education categories for heads of households, high school program concentration of respondents, and population size of respondents' communities.

The full report of this survey should be studied by those interested in examining methodology or coverage of the questionnaire. As will be noted from the tables included here, the exact number of acceptable answers varied by question. However, the male-female response (the question with the most acceptable answers) included 45,887 who reported their after-high school plans and 30,402 who reported education plans after high school. These figures can be compared with the 78,222 students in grade 12 in Indiana public and private schools in the 1968-69 school year.

As indicated by Table 9, 24 percent of the 1969 seniors responding to the questionnaire planned to be employed immediately after high school. A large group, 62.9 percent of the total, plan to continue their education after high school. This group includes 42.9 percent who plan for a full-time education and 20 percent who plan for a part-time education (including responses of either full-time employment and part-time education or part-time employment and part-time education). In addition, some of the 6.2 percent who intend to enter the military service after high school plan to continue their education later. (In Table 9, the "military service" group includes responses: (a) military service, no further education and (b) military service, then education.) Finally 7 percent of the seniors had "marriage" or "other" plans, with over twice as many girls giving these responses as boys. There appears to be little difference in the percentage of girls and boys planning to continue their education, although the military service item may include a number of boys who are interrupting education plans. On the other hand, boys with high grade averages (those most likely to continue their education) report markedly less inclination to enter military service after high school.

The results according to grade averages (the seniors reported their own) appear as might be expected. High grade averages in high school are directly related to full-time education plans and inversely related to plans for immediate employment, military service, or marriage. Only 5.7 percent of the 2,713 seniors who reported that they were A students intend to begin working after high school. However, 85.6 percent plan full-time education, and another 5.6 percent will search for part-time education. Among the D average students, 41.4 percent will seek immediate employment; 17.0 percent plan to enter the military; and only 9.5 percent plan to go to college full time. However, 20.5 percent of the D students plan to attempt part-time education. As noted in Table 10, a large portion of these D students hope to attend vocational and technical or"other"institutions.

Regional differences reported in Table 9 are of interest, but caution should be used in interpreting these results. Regional averages should be compared with detail on county differences reported in Appendix B. Furthermore, degree of coverage of the high school senior population within the various regions should be considered.

Table 10 provides detail on those seniors who reported that they plan to continue their education.[19] Over 30 percent (30.4 percent) plan to attend a main campus of the public universities, and 13.4 percent plan to attend regional campuses. Of special interest is the fact that 4,979 respondents reported plans to attend vocational or technical schools (including IVTC and also other business or technical schools). This is a larger number than those planning to attend regional campuses.

By grade average, the A and B students are more likely to plan to attend main campuses, private universities, or out-of-state colleges than are C and D students. On the other hand, the vocational students and those reporting "other" plans include a higher portion of the C and D students. The pattern for students selecting a regional campus is mixed. For example, only 7.9 percent of the A students have selected a regional campus, but almost 15 percent of the B students have made such a choice. Likewise, 13.5 percent of the C students plan to attend a regional campus, but only 7.7 percent of the D students intend to do so. (In fact, the D students are heavily weighted toward "other" plans, which includes "indefinite.")

Plans to attend out-of-state colleges are of interest as a comparison with estimates based on recent national student migration studies. Of the 20,180 seniors who reported plans to attend college (not including the vocational or "other" items), 18.3 percent plan to attend college outside Indiana, with wide regional variations. Estimates based on the national migration studies show that approximately 16.5 percent of Indiana freshmen attend college out of state. The higher percentage of 1969 high school seniors planning to attend out-of-state schools, however, might be explained by differences between plans and actual attendance. Nonetheless, the regional variations are of interest in calculating college participation rates of high school graduates, as discussed previously in this report.

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[19] Although only those who planned to continue their education were intended to answer this question, 3,706 students who reported "immediate employment" plans, also reported their choice of educational institution. Presumably these respondents plan to continue their education at a later date. The relationship between after-school plans and college plans may be noted in Table 14.

Regional differences in college plans obviously are affected by the presence of an educational institution in the region. Region 3 (Fort Wayne regional campuses) and Region 13 (the Indiana University Southeast campus) have especially high percentages planning to attend regional campuses. On the other hand, Region 7, where Indiana State University is located, has a very high percentage (50.3 percent) who plan to attend a main campus and a low percentage (0.7 percent) planning to attend a regional campus.

Tables 11 and 12 give some indication of after-school plans and college plans by broad socioeconomic categories. Only education and occupation of the seniors' fathers (or head of household) were available from the questionnaire to indicate socioeconomic status of the students. Of course, education and occupation are highly related, and both might be considered a proxy for family income level.

Again, as might be expected, the seniors whose fathers have a college education are most likely to have plans for full-time education after high school. It is interesting to note that although less than 12 percent of the respondents had fathers (heads of household) who had completed college, almost 63 percent of the group planned to continue their education past high school. Those seniors coming from a family with a college graduate as head of the household are very likely to have college plans (87.3 percent plan further education) and are most likely to attend a main campus of a state university (41.7 percent), an out-of-state college (22.1 percent), or a private college or university in Indiana (15.0 percent). Less than 10 percent of these seniors plan to attend a regional campus, and only 4.5 percent plan to attend vocational schools. On the other hand, of those seniors whose fathers did not finish high school, only 48.5 percent plan to continue their education, and 23.9 percent of these plan to attend a vocational or technical school.

Table 12 reports seniors' plans by occupation of the head of household. Unfortunately, a very large portion of the occupation total is included in the category "skilled, semiskilled, and unskilled" occupations, and this does not permit the formation of precise categories by socioeconomic status. Nonetheless, the results are as might be expected. Seniors from professional homes are more likely to have college plans than any other group. They are also least likely to have plans for vocational schooling, although 10 percent of the potential students from homes grouped as professional and semiprofessional plan to attend vocational schools.

It is interesting to note that 57.5 percent of the seniors indicated that they hoped to be in a job that is included under professional and semiprofessional. However, 57.4 percent of the seniors come from a home where the household head's occupation is skilled, semiskilled, or unskilled, and a much smaller portion comes from homes in which the head of the household is in the professional category.

Seniors' plans were also reported by population size of the seniors' communities of residence (Table 13). Table 13 seems to confirm the impression that youths from urban areas are more likely to continue their education beyond high school than are those from nonurban areas. Only 18.5 percent of the seniors from the largest cities plan immediate employment (not including employment combined with education), while 30.0 percent from the smallest rural areas with less than 1,000 population had such intentions. There is also a noticeable tendency for students from larger areas to attend regional campuses, undoubtedly because the regional campuses are located in population centers.

Table 14 shows the survey results in a different framework. It includes a profile of the expected 1969 freshman class on the main and regional campuses of the state universities and vocational schools. To the extent that the respondents are characteristic of the total freshman student body that might be expected in fall, 1969, these profiles show the variations in make-up of the freshman classes among the various institutions. It should be remembered that this profile represents only Indiana freshmen. Out-of-state students admitted to Indiana schools no doubt exhibit significantly different characteristics, for higher academic admission standards for out-of-state applicants and the greater expense of out-of-state enrollment probably result in differences in socioeconomic characteristics and grade averages. Because a large portion of the freshman class in Indiana private colleges comes from out of state, similar profiles derived from the Indiana survey would be misleading.

and they are not included in Table 14. Since the public schools enroll primarily Indiana students, however, the profiles are of interest.

If the profiles are representative, the main campus freshmen will include 53.7 percent B students and 65.8 percent either A or B students. On the other hand, the regional campus freshmen will be only 50.7 percent A or B average students, and the vocational school enrollees will include only 27.6 percent students who averaged A or B in high school. Several other noticeable differences between regional campus and main campus students are evident. First, about two-thirds of the first-time students in vocational schools will come from homes where the head of the household is in an occupation considered skilled, semiskilled, or unskilled. Second, about one-fifth of the freshmen on the main campuses will come from homes where the head is a college graduate--almost twice the percentage on regional campuses. Third, both main campuses and vocational schools will have almost 60 percent of their freshman class from communities under 25,000 population, compared with only 38.5 percent on the regional campuses. Fourth, only 9 percent of the freshmen on main campuses plan part-time education, compared to 32.3 percent for the regional campuses and 52.9 percent in vocational schools. Finally, a large portion of the freshmen on main and regional campuses will have planned for college with a college preparatory concentration in high school; only 16.7 percent of the students planning to enter vocational schools took such a course.

As noted, Appendix B includes further detail about regional characteristics and seniors' plans by county. A map of IVTC regions is also included for reference. The college plans reported in Table B-3 are of particular interest. For example, college plans by county indicate that seniors in a county with a state university have a much higher than average tendency to report plans to attend a main campus. These range from 39.2 percent for Delaware County seniors to a high of 61.0 percent for Tippecanoe County seniors. As might be expected, seniors in the counties with a regional campus report higher than average plans to attend a regional campus. The portion planning to attend regional campuses from these counties ranges from 17.2 percent in Marion County to 32.5 percent in Floyd County. Noticeably, other counties with a high portion of seniors planning to attend regional campuses are adjacent to regional campus counties. In fact, 79.0 percent of the total number of seniors planning to attend regional campuses are from counties with a regional campus. Obviously, if counties adjacent to regional campuses were included, a much higher portion of the total would be represented.

TABLE 9

After-High School Plans of 1969 High School Seniors by Sex, Grade Average, and IVTC Region

	Immediate Employment	Full-time Education	Part-time Education	Military Service*	Marriage & Other	Total No. Respondents (100%)
Sex						
Male	19.7%	43.5%	20.9%	11.5%	4.5%	23,364
Female	28.4	42.3	19.0	0.7	9.6	22,523
Total state	24.0	42.9	20.0	6.2	7.0	45,887
Grade average						
A	5.7	85.6	5.6	0.7	2.4	2,713
B	15.8	62.2	15.4	2.1	4.5	16,045
C	29.5	29.0	24.8	8.5	8.2	22,180
D	41.4	9.5	20.5	17.0	11.5	1,760
Unknown	33.2	22.7	21.5	10.5	12.1	2,868
Region						
1	22.2	44.2	21.5	6.5	5.6	8,764
2	22.0	45.7	19.0	6.7	6.6	4,891
3	27.2	40.3	19.6	5.7	7.2	4,266
4	25.7	45.4	14.7	6.4	7.8	2,766
5	25.2	42.9	16.7	5.4	9.8	2,162
6	25.7	41.1	18.5	6.1	8.6	2,861
7	20.5	43.8	21.4	7.7	6.6	2,414
8	22.2	44.4	21.4	5.7	6.4	8,069
9	26.2	40.3	19.3	6.1	8.1	1,376
10	28.5	40.5	16.3	6.2	8.5	1,300
11	30.6	39.2	16.4	6.2	7.6	1,291
12	24.3	39.7	22.5	6.6	6.9	4,166
13	26.5	36.6	22.8	6.1	8.0	2,044

*Includes those who plan to continue education subsequent to military service.

SOURCE: Survey of high school seniors conducted by Indiana Vocational Technical College with cooperation from Indiana Higher Education Facilities Comprehensive Planning Study.

TABLE 10

Percentage of 1969 High School Seniors Planning to Attend Various Higher Education Institutions by Sex, Grade Average, and IVTC Region

	Public, Main	Public, Regional	Private, Indiana	Out-of-State College	Vocational or Technical	Other*	Total No. of Respondents (100%)
Sex							
Male	29.6%	14.1%	10.8%	13.4%	15.2%	17.0%	15,935
Female	31.4	12.5	10.0	10.8	17.7	17.6	14,467
Total state (%)	30.4	13.4	10.4	12.2	16.4	17.2	30,402
Total respondents	9,255	4,064	3,160	3,701	4,979	5,243	30,402
Grade average							
A	45.5	7.9	21.6	19.2	2.8	2.9	2,442
B	39.6	14.9	13.1	12.4	10.4	9.5	12,459
C	21.3	13.5	6.5	11.0	23.1	24.6	13,190
D	9.0	7.7	2.8	8.8	28.9	42.7	634
Unknown	18.5	11.5	6.5	9.8	24.1	29.7	1,489
Region							
1	27.4	19.5	7.9	14.5	14.7	15.9	6,223
2	25.2	14.1	11.5	16.9	17.5	14.8	3,388
3	18.2	23.8	13.1	11.5	13.4	20.0	2,873
4	49.0	1.8	6.9	9.3	17.5	15.4	1,770
5	29.3	14.5	11.4	9.8	17.5	17.5	1,366
6	33.1	2.9	12.4	12.0	18.4	21.3	1,754
7	50.3	0.7	8.1	9.1	15.4	16.5	1,613
8	32.2	14.2	10.3	12.0	14.8	16.5	5,449
9	29.7	3.7	9.8	13.3	21.3	22.2	818
10	38.9	2.5	10.9	11.6	18.7	17.4	769
11	36.8	2.6	9.5	13.2	17.3	20.6	695
12	26.5	9.9	16.0	7.8	20.9	18.8	2,674
13	23.0	25.3	6.2	9.8	17.6	18.2	1,291

*Includes such answers as trade apprenticeship, indefinite, and other.

SOURCE: Survey of high school seniors conducted by Indiana Vocational Technical College with cooperation from Indiana Higher Education Facilities Comprehensive Planning Study.

TABLE 11

After-High School Plans and Percentage of 1969 High School Seniors Planning to Attend Various Higher Education Institutions by Education of Head of Household

	Education, Head of Household					
	Less than High School (& Unknown)	High School Graduate	Some College	College Graduate	Total Percent	Total No. of Respondents
After-school plans						
Immediate employment	34.1%	24.6%	15.8%	6.8%	24.0%	10,969
Full-time education	26.0	41.4	54.3	76.7	42.9	19,630
Part-time education	22.5	20.9	19.6	10.6	20.0	9,140
Military service*	8.1	6.2	5.0	2.7	6.2	2,841
Marriage and other	9.2	6.9	5.4	3.3	6.9	3,166
Total number (100%)	14,622	17,525	8,277	5,322	100.0	45,246
Plans to attend college						
Public, main	20.7	30.5	34.1	41.7	30.3	9,205
Public, regional	13.5	13.8	15.2	9.8	13.4	4,068
Private, in-state	8.2	9.6	11.6	15.0	10.4	3,165
Out-of-state	9.4	10.0	12.7	22.1	12.2	3,701
Vocational or technical	23.9	17.9	12.7	4.5	16.4	4,981
Other+	24.3	18.2	13.7	6.9	17.2	5,226
Total number (100%)	8,013	11,511	6,288	4,534	100.0	30,346

*Includes those who plan to continue education subsequent to service.

+Includes trade apprenticeship, indefinite, and other.

SOURCE: Survey of high school seniors conducted by Indiana Vocational Technical College with cooperation from Indiana Higher Education Facilities Comprehensive Planning Study.

TABLE 12

After-High School Plans and Percentage of 1969 High School Seniors Planning to Attend Various Higher Education Institutions by Occupation of Head of Household

	Occupation of Head of Household					
	Professional and Semi-Prof.	Manager, Official	Clerks and Kindred Workers	Skilled, Semi-Skilled and Unskilled	Total Percent	Total No. of Respondents
After-school plans						
Immediate employment	14.6%	19.0%	18.3%	28.8%	23.6%	10,137
Full-time education	58.5	52.9	53.3	35.3	44.0	18,865
Part-time education	16.4	18.1	18.4	21.3	19.6	8,421
Military service*	5.4	4.5	4.7	6.8	6.0	2,562
Marriage and other	5.1	5.6	5.3	7.8	6.7	2,889
Total number (100%)	8,513	5,412	4,381	24,568	100.0	42,874
Plans to attend college						
Public, main	35.6	35.1	35.5	26.9	31.0	8,907
Public, regional	12.1	14.9	14.7	13.4	13.5	3,871
Private, in-state	12.8	10.7	11.6	9.5	10.6	3,055
Out-of-state	17.9	12.4	13.3	9.5	12.2	3,503
Vocational or technical	10.0	13.4	12.8	20.3	16.2	4,661
Other+	11.6	13.6	12.1	20.5	16.6	4,775
Total number (100%)	6,445	3,916	3,235	15,176	100.0	28,772

*Includes those who plan to continue education subsequent to service.

+Includes trade apprenticeship, indefinite, and other.

SOURCE: Survey of high school seniors conducted by Indiana Vocational Technical College with cooperation from Indiana Higher Education Facilities Comprehensive Planning Study.

TABLE 13

After-High School Plans and Percentage of 1969 High School Seniors Planning to Attend Various Higher Education Institutions By Population Size of Seniors' Community of Residence

	Population of Seniors' Residence					
After-school plans	Rural (Under 1,000)	1,000-4,999	5,000-24,999	25,000-49,999	50,000+	Total No. of Respondents
Immediate employment	30.0%	27.0%	23.7%	21.9%	18.5%	10,831
Full-time education	37.0	39.8	45.1	44.8	48.8	19,508
Part-time education	19.0	19.0	17.8	20.3	21.3	8,981
Military service	6.0	6.4	6.4	6.4	5.9	2,830
Marriage and other	8.0	7.9	6.9	6.5	5.4	3,158
Total number (100%)*	6,793	6,859	12,098	3,789	13,533	45,308
Plans to attend college						
Public, main	30.2	30.8	33.2	32.0	29.4	9,152
Public, regional	8.4	8.3	10.5	17.8	18.4	4,008
Private, in-state	11.7	11.3	11.0	7.7	10.3	3,136
Out-of-state	8.6	10.3	12.5	11.8	14.7	3,676
Vocational or technical	21.1	19.7	15.3	15.6	13.2	4,918
Other	20.0	19.5	17.4	15.2	13.9	5,165
Total number (100%)+	4,068	4,368	8,014	2,571	9,822	30,055

*Row does not total because of 3,158 that answered size of community "unknown."

+Row does not total because of 1,212 that answered size of community "unknown."

SOURCE: Survey of high school seniors conducted by Indiana Vocational Technical College with cooperation from Indiana Higher Education Facilities Comprehensive Planning Study.

TABLE 14

Profile of 1969 High School Seniors Planning to Attend Various Public Institutions of Higher Education

Characteristic	State Universities (Main Campus)	Regional Campuses	Vocational or Technical Schools
High school grade average			
A	12.1%	4.8%	1.4%
B	53.7	45.9	26.2
C	30.5	43.9	61.5
D	0.6	1.2	3.7
Unknown	3.0	4.2	7.2
Total number (100%)	9,179	4,046	4,952
Father's (household head) occupation			
Professional and semi-professional	25.8	20.2	13.8
Manager official	15.4	15.1	11.2
Clerks and kindred workers	12.9	12.2	8.9
Skilled, semi. and unskilled	45.9	52.5	66.0
Total number (100%)	8,907	3,871	4,661
Father's (household head) education			
Less than high school and unknown	18.0	26.5	38.5
High school graduate	38.1	39.1	41.4
Some college	23.3	23.4	16.0
College graduate	20.5	10.9	4.1
Total number (100%)	9,205	4,068	4,981
Size community of residence			
Rural-under 1,000	13.4	8.5	17.5
1,000-4,999	14.7	9.0	17.5
5,000-24,999	29.0	21.0	25.0
25,000-49,999	9.0	11.4	8.2
50,000 or higher	31.6	45.2	26.4
Unknown	2.2	4.9	5.4
Total number (100%)	9,152	4,008	4,918
High school concentration			
College preparatory	88.2	77.3	16.7
Vocational education	1.7	3.2	22.1
Business education	4.2	8.6	38.6
General education	5.3	9.5	18.8
Other	0.7	1.5	3.8

(continued)

Characteristic	State Universities (Main Campus)	Regional Campuses	Vocational or Technical Schools
After-high school plans			
Immediate employment	4.9	7.3	15.4
Full-time education	83.4	55.7	22.7
Part-time education	9.0	32.3	52.9
Military service	1.4	2.2	4.5
Marriage and other	1.4	2.5	4.5
Total number (100%)	9,254	4,070	4,986

2

III. CURRENT SUPPLY

Indiana has a large number of institutions of higher education throughout the state, including 4 state universities, 12 regional campuses of the public universities, 1 public two-year campus, a number of extension offerings of the public institutions, and 34 private institutions.[1] The geographic distribution of these institutions is shown in Figure 2. In addition, the number of institutions is currently expanding with the growth of Indiana Vocational Technical College (IVTC) throughout the state.

We know (although it is difficult to prove) that for some individual students effective demand for post-high school education is related to the student's ability to attend an institution without changing his residence or job. We therefore want to review the accessibility of Indiana's institutions to its youths. In addition, this section includes some comments on the makeup of the student body in regional campuses. Such information about the students being served by present institutions can be helpful in projecting the growth of these institutions as specific educational demands expand.

ACCESSIBILITY OF INSTITUTIONS TO INDIANA YOUTHS

It has become traditional in Indiana to show the relationship of existing public and private institutions to demand by stating that over 90 percent of the state's high school graduates live within 25 miles of a public or private campus that offers at least the first two years of college. This statistic was first developed in 1949 when circles were drawn around campus locations on a map that showed the size and location of high school

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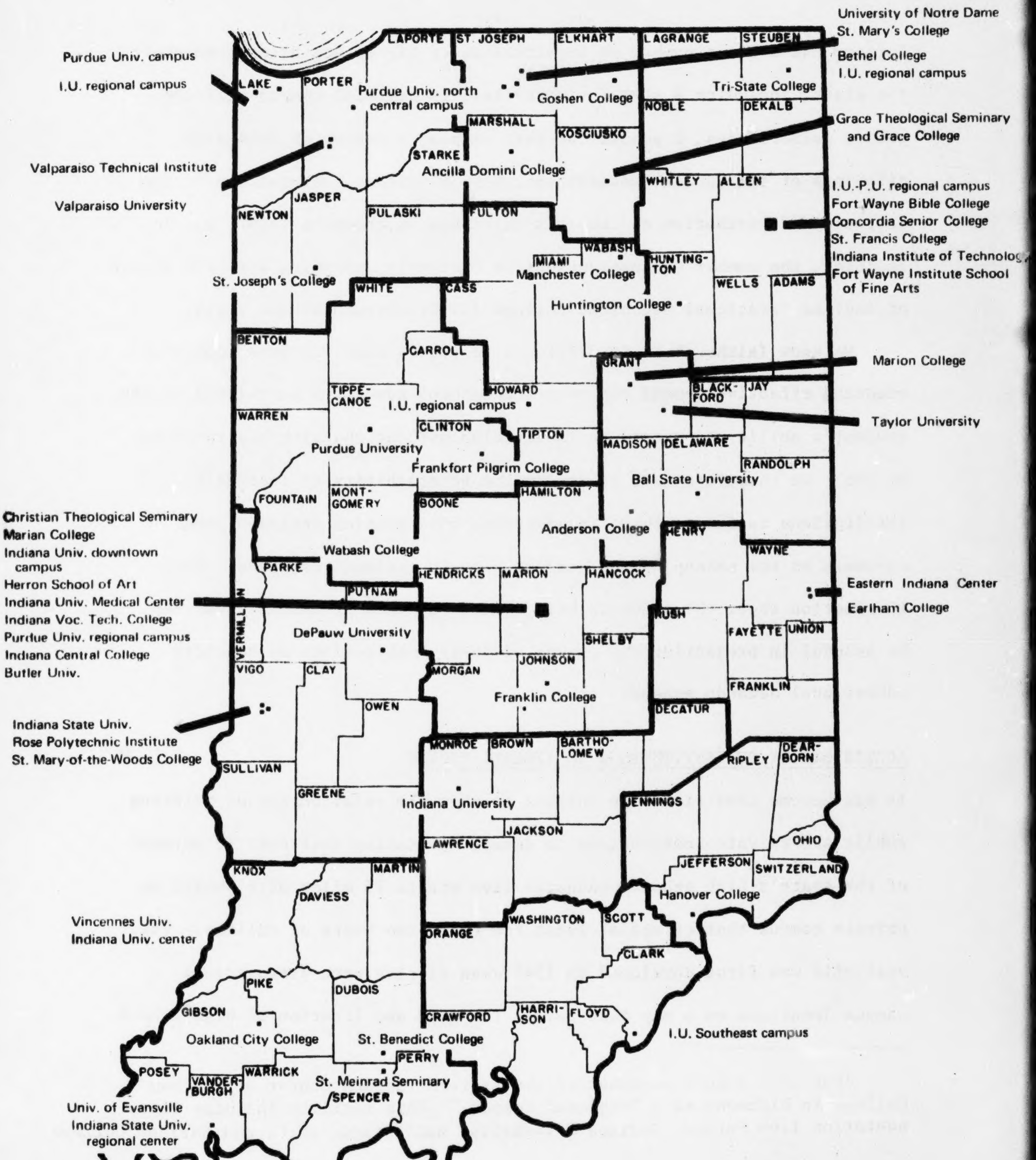
[1] For this report we consider the Eastern Indiana Center of Earlham College in Richmond as a "regional campus." This facility includes representation from Purdue, Indiana University, Ball State, IVTC, and Earlham College.

FIGURE 2

Location of All Institutions of Higher Education in Indiana


University of Notre Dame
St. Mary's College
Bethel College
I.U. regional campus
Purdue Univ. campus
I.U. regional campus
LAKE
PORTER
LAPORTE
ST. JOSEPH
ELKHART
LAGRANGE
STEUBEN
Purdue Univ. north central campus
Goshen College
Tri-State College
NOBLE
DEKALB
Grace Theological Seminary and Grace College
MARSHALL
KOSCIUSKO
Valparaiso Technical Institute
STARKE
Ancilla Domini College
Valparaiso University
JASPER
NEWTON
PULASKI
FULTON
WHITLEY
ALLEN
I.U.-P.U. regional campus
Fort Wayne Bible College
Concordia Senior College
St. Francis College
Indiana Institute of Technology
Fort Wayne Institute School of Fine Arts
MIAMI
WABASH
HUNTINGTON
Manchester College
St. Joseph's College
WHITE
CASS
WELLS
ADAMS
Huntington College
BENTON
CARROLL
GRANT
Marion College
BLACKFORD
JAY
TIPPECANOE
HOWARD
I.U. regional campus
WARREN
CLINTON
TIPTON
Taylor University
Purdue University
MADISON
DELAWARE
RANDOLPH
Frankfort Pilgrim College
Ball State University
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
Christian Theological Seminary
Marian College
Indiana Univ. downtown campus
Herron School of Art
Indiana Univ. Medical Center
Indiana Voc. Tech. College
Purdue Univ. regional campus
Indiana Central College
Butler Univ.
Anderson College
HENRY
Wabash College
WAYNE
PARKE
HENDRICKS
MARION
HANCOCK
Eastern Indiana Center
Earlham College
PUTNAM
VERMILLION
RUSH
DePauw University
FAYETTE
UNION
SHELBY
JOHNSON
VIGO
CLAY
MORGAN
FRANKLIN
OWEN
Franklin College
Indiana State Univ.
Rose Polytechnic Institute
St. Mary-of-the-Woods College
DECATUR
MONROE
BROWN
BARTHOLOMEW
RIPLEY
DEARBORN
SULLIVAN
GREENE
Indiana University
JENNINGS
JACKSON
OHIO
LAWRENCE
KNOX
MARTIN
JEFFERSON
SWITZERLAND
DAVIESS
Hanover College
Vincennes Univ.
Indiana Univ. center
WASHINGTON
SCOTT
ORANGE
CLARK
PIKE
DUBOIS
GIBSON
CRAWFORD
HARRISON
FLOYD
Oakland City College
St. Benedict College
I.U. Southeast campus
PERRY
POSEY
VANDERBURGH
WARRICK
St. Meinrad Seminary
SPENCER
Univ. of Evansville
Indiana State Univ. regional center

graduation classes. It was confirmed by a 1956 Indiana Conference on Higher Education study (reported by the Indiana Conference on Higher Education) which stated:

> Of a total 40,188 graduates in public, private, and parochial high schools in Indiana, 40.3 percent had a choice of four or more colleges, universities, or extension centers within 25 miles of their high schools, 12.6 percent had a choice of three, 16.9 percent had a choice of two, 21.5 percent were within 25 miles of one such institution, and 8.7 percent were more than 25 miles from a college, university, or extension center. . . .[2]

Several refinements in this definition of accessibility should be considered. For example, with the improvements that have occurred in transportation over the past two decades, the definition of accessibility could be expanded to include areas beyond a 25-mile radius. Furthermore, there is a need to differentiate between the educational opportunities available to local youths at small private colleges and those available at the major state universities. Two recent studies have commented on current accessibility. A 1968 report of the State Policy Commission on Post High School Education noted:

> . . . by carefully drawing circles with a 25-mile radius it could be observed that some post high school educational institution is available to residences of all but 5 to 7 counties. However, the majority of these institutions are private colleges charging relatively high tuition and generally maintaining high admission requirements. Only by drawing a circle with a 50-mile radius is it possible to include most of Indiana within a range of the public colleges or the regional campuses. Although 50 miles does not seem to be a great distance, it is, due to a lack of public transportation, prohibitive to those without automobiles in most of Indiana.[3]

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[2] Indiana Conference on Higher Education, "A Survey of Needs and Resources: The Capital, Operating, Personnel, and Curriculum Needs of Higher Education in Indiana" (November, 1957), pp. 10-11.

[3] State Policy Commission on Post High School Education, An Indiana Pattern for Higher Education (Indianapolis: State of Indiana, December, 1968), p. 61.

On the other hand, the 1968 freshman census made a different observation. Commenting on data from various institutions about the portion of the student body from the local area, Elliott noted:

> These data show clearly that the public universities' regional campuses do indeed serve the residents of the region in which they are located, as they were created to do, while the private institutions generally do not orient themselves to their local region, which also is to be expected, for they have seldom represented such local service as among their missions. It does, however, point out the possible irrelevance of the much-used statement that ninety per cent of Indiana college age youth are within 25 miles of an institution of higher education if it is meant to suggest the geographical availability of educational opportunity to students in Indiana.
>
> A parallel statement about only the public universities' campuses, however, may have considerable relevance. For example, an analysis of the 1950 births in each county revealed that approximately eighty-five percent were within 30 miles of a campus of one of the four publicly supported universities. If Vincennes University and the Eastern Indiana Center were added to the areas served by the four main and eleven regional campuses, the figure would be approximately ninety-two per cent.[4]

Drawing circles helps to pinpoint areas with little or no accessibility to nearby campuses, but additional detail is needed for planning future facilities on the basis of geographic need. For example, we know that some relatively small portion of the population cannot easily commute to any educational institution, but this portion may be located in an area not offering sufficient enrollment potential for such an institution.

As the observations above indicate, public and private institutions do not offer the same opportunity to local youths. With different program offerings, admission requirements, and tuition costs, these institutions do not represent equal alternatives for potential students.

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[4] Report of the 1968 Indiana Freshman Student Census, pp. 16-18.

Furthermore, the simple drawing of circles cannot accurately describe accessibility. The lack of adequate roads leading directly from the students' residences to campus sometimes more than doubles traveling distance for some students within a 25-mile circle and certainly can increase traveling time and inconvenience.

Of course, not all students are limited by geography. Those with adequate funds, sufficient motivations, and an indication of ability can choose between many public and private institutions in Indiana and out of state. The geographic demand for education, then, is related to those who are limited to nearby institutions for their higher education. For this group, only an institution that offers low-cost education with low-admission requirements and a comprehensive program can offer a choice to all. Indiana's public institutions of higher education are not characteristically low-cost, open-door institutions, and many regional campuses do not have extensive programs at this time. However, the public institutions are closer to a combination of these three characteristics than are most private institutions in the state.

Table 15 shows all the Indiana cities with a population over 20,000 and the highway mileage from them to public institutions. For purposes of the comparison shown in this table, a city population of 20,000 was considered necessary to support a public institution with a comprehensive program.[5] In fact, the 25 cities with a population over 20,000 comprised about 41 percent of the total state population in 1967 and probably included a higher percentage of the state's potential college students because, as we have noted, urban areas have higher participation rates.

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[5] Location criteria for the establishment of a public institution are discussed in Part II of this report, and projections of potential enrollment suggest a test of the practicality of this measure.

TABLE 15

Indiana Cities over 20,000 Population and Distances to Public Campuses*

City (County)	City Population 1967 (000)+	Highway Miles to Public Campus*			University in Same County?
		University	City	Miles	
1. Anderson (Madison)	70.0	Ball State	Muncie	19	No
		I. U. Regional	Indianapolis	39	No
		Purdue Regional	Indianapolis	39	No
2. Bloomington (Monroe)	43.6	I. U.	Bloomington	0	Yes
3. Columbus (Bartholomew)	25.6	I. U.	Bloomington	36	No
		I. U. Regional	Indianapolis	43	No
		Purdue Regional	Indianapolis	43	No
4. East Chicago (Lake)	52.0	I. U. Regional	Gary	9	Yes
		Purdue Regional	Hammond	2	Yes
		Purdue Regional	Westville	40	No
5. Elkhart (Elkhart)	44.7	I. U. Regional	South Bend	15	No
6. Evansville (Vanderburgh)	144.7	I. U. Regional	Evansville	0	Yes
		Indiana State Regional	Evansville	0	Yes
7. Fort Wayne (Allen)	173.2	I. U. Regional	Fort Wayne	0	Yes
		Purdue Regional	Fort Wayne	0	Yes
8. Gary (Lake)	182.8	I. U. Regional	Gary	0	Yes
		Purdue Regional	Hammond	10	Yes
		Purdue Regional	Westville	32	Yes
9. Hammond (Lake)	110.5	I. U. Regional	Gary	10	Yes
		Purdue Regional	Hammond	0	Yes
		Purdue Regional	Westville	31	No
10. Highland (Lake)	23.5	I. U. Regional	Gary	15	Yes
		Purdue Regional	Hammond	2	Yes
		Purdue Regional	Westville	30	No

(continued)

11.	Hobart (Lake)	21.2	I. U. Regional	Gary	3	Yes
			Purdue Regional	Hammond	13	Yes
			Purdue Regional	Westville	21	No
12.	Indianapolis (Marion)	519,0	I. U. Regional	Indianapolis	0	Yes
			Purdue Regional	Indianapolis	0	Yes
13.	Kokomo (Howard)	51.9	I. U. Regional	Kokomo	0	Yes
			Purdue	Lafayette	46	No
14.	Lafayette (Tippecanoe)	45.2	I. U. Regional	Kokomo	46	No
			Purdue	Lafayette	0	Yes
15.	LaPorte (LaPorte)	22.2	I. U. Regional	South Bend	26	No
			I. U. Regional	Gary	38	No
			Purdue Regional	Hammond	48	No
			Purdue Regional	Westville	12	Yes
16.	Logansport (Cass)	21.3	I. U. Regional	Kokomo	24	No
			Purdue	Lafayette	39	No
17.	Marion (Grant)	39.9	I. U. Regional	Kokomo	30	No
			Ball State	Muncie	36	No
18.	Michigan City (LaPorte)	41.0	I. U. Regional	Gary	25	No
			I. U. Regional	South Bend	36	No
			Purdue Regional	Hammond	35	No
			Purdue Regional	Westville	7	Yes
19.	Mishawaka (St. Joseph)	35.6	I. U. Regional	South Bend	4	Yes
			Purdue Regional	Westville	38	No
20.	Muncie (Delaware)	73.2	Ball State	Muncie	0	Yes
21.	New Albany (Floyd)	39.1	I. U. Regional	Jeffersonville	6	No
			Purdue Regional	New Albany	0	Yes
22.	New Castle (Henry)	21.7	Ball State	Muncie	19	No
			I. U. Regional	Indianapolis	50	No
			Purdue Regional	Indianapolis	50	No

(continued)

23.	Richmond (Wayne)	48.3	Ball State	Muncie	42	No
			Eastern Indiana Center, Earlham	Richmond	0	Yes
24.	South Bend (St. Joseph)	138.0	I. U. Regional	South Bend	0	Yes
			Purdue Regional	Westville	38	No
25.	Terre Haute (Vigo)	75.0	Indiana State	Terre Haute	0	Yes

* Only public universities and regional campuses within 50 miles are included. Note all 25 cities were within 50 miles of at least one regional or main campus. Several distances to universities were not listed because they were 51 miles away.

+ Population based on an Indiana State Board of Health, July 1, 1967 estimate.

Fourteen of the 25 largest cities in Indiana now have a public institution of higher education (not including IVTC). If a range of 15 miles is considered local, six more cities can be included. The cities vary in distance from public institutions, and it is difficult to measure distance for adjacent cities such as South Bend and Mishawaka and for megapolis areas such as the Calumet area in Lake County. For example, East Chicago and Highland are listed as two miles from Gary and Hammond, but for many purposes this area must be considered as one market.

If "reasonable commuting distance" were considered to be 30 miles, then four more of the cities could be included within commuting range of a public campus. Marion is located farther from a campus than any other city in this group--30 miles from Kokomo and 36 miles from Ball State University in Muncie. Among the cities with a population of over 20,000, only Columbus is farther than 30 miles from any public institution of higher education. Columbus is 36 highway miles from Indiana University in Bloomington and is on an excellent highway 43 miles from Indianapolis. No city in Indiana over 20,000 is farther than 40 miles from a public institution.[6]

Obviously, in Indiana the larger cities have been considered in the development of a broad geographic system of public higher education. Now we must consider how students from the outlying areas are served. The question is whether most of those students who seek a commuter-type education and live outside the major cities are within "reasonable commuting distance" from a public institution of higher education. This question, too, is difficult in the abstract. For the individual student, commuting accessibility must be individually defined. Highway mileage (such as shown in Table 15) is an improvement over drawing circles, but we need to know the distances traveled from home to campus and the time involved in the trip.

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[6] It should be noted that the distances shown represent miles from one city limit to the other, not to the campus. However, this meshing of areas represents no more of a problem for the researcher than that of determining the exact origin of the student. The student may not live and work in the same city if adjacent cities are involved. His residence may be an accident of boundry lines and not truly related to accessibility to the campus. Furthermore, the individual student is often more concerned with accessibility to the highway system than with extra miles to an adjacent city.

One measure of reasonable commuting distance is the distance that presently commuting students are willing to travel (Table 16). In the fall of 1967 Indiana University prepared a questionnaire for the students at all its regional campuses in an attempt to discover the distance traveled and the cost involved in their trips to class. Tables 16 and 17 present responses to the questions concerning actual miles traveled (home to campus) and the mode of transportation.

As might be expected, the results vary for the individual campuses. Only 9.4 percent of the total group traveled more than 25 miles to campus, but a larger portion of the student body traveled over 25 miles to the Fort Wayne (14.2 percent), Kokomo (12.4 percent), and Southeast (19.4 percent) campuses. Only 6.1 percent of the total traveled over 30 miles.

The Southeast campus has the largest portion of those traveling over 40 miles from home to campus, with 116 students, or 7.6 percent of its total student body, traveling 40 or more miles. On the other hand, a higher than average portion of students live very close to campus (0-5 miles) on the Fort Wayne, Kokomo, and South Bend campuses.

TABLE 16

Mileage Traveled Home to Campus, By Percentage of Indiana University Regional Campus Students, Fall, 1967

	Mileage Traveled										
Campus	0-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	40+	Over 25	Total No. Respondents
Fort Wayne	43.5%	24.0%	7.8%	4.7%	5.8%	4.6%	2.8%	2.1%	4.7%	(14.2%)	1,838
Indianapolis	26.5	38.7	17.1	6.5	3.4	2.5	1.3	1.3	2.7	(7.8)	3,542
Kokomo	49.5	12.0	10.2	5.7	10.3	6.2	2.9	1.8	1.4	(12.4)	1,042
Northwest	36.3	30.1	18.9	8.4	2.7	1.8	0.7	0.5	0.6	(3.6)	3,019
South Bend	51.6	19.8	9.3	6.9	4.5	3.1	1.9	1.4	1.5	(7.9)	2,863
Southeast	34.1	24.1	11.8	6.5	4.1	5.1	3.7	3.1	7.6	(19.4)	1,526
Total Percentages*	38.6	27.3	13.5	6.7	4.4	3.3	1.9	1.5	2.7	(9.4)	13,830
Total Number	5,349	3,781	1,872	924	607	457	260	204	376	(1,297)	13,830

*Totals may not equal 100 percent due to rounding.

SOURCE: Percentages computed from Recap of Fall, 1967, Student Survey, Indiana University Division of Regional Campuses.

We have no measure of the average time spent by commuters to the various campuses. Some observers say that reasonable commuting time is one hour one way. This time is variously estimated to involve from 25 to 50 miles and, if the mileage were known, would define the potential commuter market. Again, however, no one measure can be right for all students.

Measuring the regional character of the student body at regional campuses came as a by-product of Indiana University's analysis of distances traveled. For example, although the Indianapolis campus might be expected to serve the seven-county area surrounding Marion County, it was found that 82 percent of the student body lived within 15 miles of campus. To varying degrees, the other campuses are serving primarily a local rather than regional student body. On the average, almost 80 percent of the student bodies at the various campuses live within 15 miles of their campuses. Although a measure of the regional market for regional institutions would be valuable in analyzing Indiana's need for an expanded system of campuses, precise detail is not available for all types of institutions. Later in this section, however, we will examine the portion of "same county" students in Indiana's institutions to measure the local demand being served by both public and private campuses.

Table 17 gives a further indication of the type of commuter students attending Indiana University's regional campuses. Only 7 percent of the students indicated their mode of transportation was either "train and bus" or "bus." An additional 2 percent walk to campus, and the remainder travel by car. Naturally, there are campus variations. Only the Indianapolis and Northwest campuses appear to have a significant number of students who travel by public transportation.

TABLE 17

Mode of Transportation to the Campus by Percentage of Indiana University Regional Campus Students, Fall, 1967

Campus	Own Car	Family Car	Train and Bus	Walk	Car Pool	Bus	Total No. Respondents
Fort Wayne	72.3%	17.3%	0.3%	0.8%	6.5%	2.5%	1,745
Indianapolis	69.5	12.3	1.5	2.6	2.8	10.9	3,566
Kokomo	75.8	19.9	0.4	1.1	2.4	0	1,041
Northwest	63.2	21.1	1.9	2.2	3.0	8.3	2,684
South Bend	69.9	22.2	0.7	2.5	3.3	4.0	2,598
Southeast	75.0	15.3	0.3	1.7	5.4	2.0	1,528
Total percentage	69.8	17.7	1.1	2.1	3.7	6.0	--
Total number	9,193	2,333	146	275	495	795	13,162

SOURCE: Recap of Fall, 1967, Student Survey.

The cost of automobile transportation, then, is significant when the factors of attending commuter campuses are compared with those of attending residence campuses. The student can afford to drive to campus only if the time and money involved are reasonable; at some point, residence on campus is a more practical alternative. However, for those who must remain at home and find it too costly or time-consuming to commute to available campuses, no educational alternative exists. Cost of commuting, then, should be another measure of what creates a reasonable alternative for many students. (Of course, some students may prefer to remain at home at any cost, and their decisions about attending college will be made on the basis of whether to commute or not to attend rather than on the basis of cost.)

The Indiana University questionnaire helps to define the alternatives in terms of cost. One analysis of the questionnaire results defines the point at which commuting becomes more expensive than dormitory cost (not including food) on the Bloomington campus (see Table 18). In 1967 the approximate break-even point for the commuter was 20 miles one way. This analysis assumes an increasing number of trips to campus for students living nearby (8 trips per week for those living 0-10 miles; 6 trips per week for 11-25 miles; and 4 trips per week for 26-40 miles). The break-even figure is based on a cost of 12¢ per mile (including maintenance and repair costs), the maximum allowed by the Internal Revenue Service. If a lower figure, such as 8¢ a mile, were used, the highest cost of commuting would be $409.60 per year for those living 40 miles from campus, and $353.28 for those within 21 to 25 miles (both amounts are less than the 1967 average dormitory cost of $451 in Bloomington).

Many part-time students travel to town for work and do not consider the trip as an expense of education. In addition, although the commuter student

TABLE 18

Transportation Costs for Commuting Students

Assumptions

1. Average miles per trip is the median of a particular category.
2. Those living closer to a particular campus tend to make more trips per week (0-10 miles, 8 trips per week; 11-25 miles, 6 trips per week; and 26-40 plus miles, 4 trips per week); trips are considered as one-way trips--number should be halved for round trips.
3. Cost per mile is the amount allowable by the Internal Revenue Service (up to 12¢ per mile).
4. Average Bloomington dormitory cost, not including subsistence, is $451 for a double room (each person) per academic year (fall, spring, total of 32 weeks).

	MILES TO CAMPUS									
	0-5 (3)*	6-10 (8)*	11-15 (13)*	16-20 (18)*	21-25 (23)*	26-30 (28)*	31-35 (33)*	36-40 (38)*	40 plus (40)*	Total
No. of Ft. Wayne students	799	442	144	86	106	84	51	39	87	1,838
Trips per academic year	256		192			128				
Miles driven per academic year	768	2,048	2,606	3,456	4,416	3,584	4,224	4,864	5,120	
Cost @ 12¢/mile	$92.16	$245.76	$312.72	$414.72	$529.92	$430.08	$506.88	$583.68	$614.40	
Average cost per student, Fort Wayne				$248.82 per academic year						
Percent within 25-mile radius, Fort Wayne				85.7%						
Students, average cost per student, Northwest	1,097	909	570	253 $231.16	81	54	21	15	19	3,019
Percent within 25-mile radius, Northwest				96.4%						

* Average miles per trip is the median of a particular category.
Interpolated from fall, 1967 student survey.

SOURCE: Indiana University Regional Campus Administration (Bloomington: Indiana University, January 7, 1969).

obviously has living expenses even at home, the cost is less explicit and probably lower in most cases than dormitory food charges. The student feels that he is saving because in many cases commuter education appears to involve only tuition and fee charges. The student often fails to calculate all costs, and this omission may add to his motivation to enroll in a nearby campus.

The calculation of 20 miles as a break-even point for commuting costs provides one measure of "reasonable commuting distance," and we have seen that a majority of regional campus students live within the range of 20 miles. Such analyses help to establish explicit costs which might otherwise be ignored by those who proclaim the low cost of commuter campuses. In addition, explicit information helps to define the potential market. However, in order to forecast the potential of regional education, we need to know what really does motivate students to attend local institutions, as well as how many students can be considered local. We will now turn our attention to these subjects.

MARKETS FOR PRIVATE AND PUBLIC INSTITUTIONS

We have suggested that private colleges and universities serve a different market from the one served by public institutions. Tables 19 and 20 help to demonstrate this difference.

Although some private schools have broad offerings and compete with the public universities for students, many of them serve a specialized clientele. A school of theology, for instance, draws its student body from a wide geographical area and is not an educational alternative for local youths, except for the small number who seek this area of study. On the other hand, some of Indiana's private institutions offer a broad choice of course work and differ from the public institutions primarily in tuition costs and admission requirements.

Such private institutions are difficult to group for they are very diverse. However, for our purposes one method of grouping has been developed. Private institutions are divided into private universities, private colleges (two groups based on enrollment), Catholic girls colleges, and engineering and technical colleges. Table 19, which averages the institutional variations, indicates a strong growth for both public and private sectors of Indiana higher education between 1961 and 1967. Although public schools grew faster in enrollment (61 percent) during this period than did private schools (25 percent), the slower but dynamic growth in private institutions has not been hindered.

However, as Table 20 demonstrates, the public institutions serve more local and state students than do the private institutions. Almost 86.5 percent of the undergraduate student body in public institutions is from Indiana, but in private institutions the Indiana student body is only 47 percent of the total undergraduate enrollment. Consequently, since we are concerned with planning for the future needs of Indiana youths, and in particular with expanding local education to make higher education more accessible to lower income groups, public institutions are of primary interest in this report.

Awareness of this difference between public and private institutions is important when attempting to judge the effect of a local institution on the propensity of local youths to attend an institution of higher education. If, in fact, youths are not attending local institutions (because they cannot qualify or do not find their choice of course work at them), then the institution has little in local impact. Public institutions should serve broad public interests and their special problem is to expand rapidly enough to serve increasing demands. We expect public institutions to expand more rapidly than private institutions to meet the demand of an ever-increasing

TABLE 19

Growth of Public and Private Institutions, 1961-67
Undergraduate Enrollment

Institutions	1961	1967	Percent Increase
Public			
1. State universities			
Indiana	11,709	19,247	
Purdue	13,145	17,750	
Ball State	6,498	11,473	
Indiana State	4,584	10,474	
Total	39,936	58,944	47.59
2. Regional Campuses	11,234	22,479	
Vincennes	618	2,188	
Total	11,852	24,667	108.12
3. IVTC and Other public post-high school vocational institutions	---	---	---
Private			
4. Private universities			
Butler	2,492	2,708	
Evansville	1,698	2,729	
Notre Dame	5,653	6,206	
Valparaiso	2,678	3,580	
Total	12,521	15,223	21.57
5. Private colleges--Group I			
DePauw	2,219	2,359	
Earlham	973	1,109	
East. Indiana Centers	---	576	
Goshen	874	1,046	
Hanover	802	979	
Indiana Central	794	972	
Manchester	1,127	1,425	
Marion	631	916	
St. Joseph	1,058	1,332	
Centers	517	991	
Taylor	805	1,251	
Wabash	714	889	
Anderson	1,016	1,447	
Total	11,530	15,292	32.62

	1961	1967	Percent Increase
6. Private Colleges--Group II			
Bethel	374	450	
Grace	336	472	
Marion	438	687	
Oakland City	652	605	
Franklin	651	716	
Huntington	371	438	
Total	2,822	3,368	19.34
7. Catholic girls colleges			
St. Benedict	84	189	
St. Francis	446	814	
St. Mary-of-the-Woods	609	620	
St. Mary's	1,029	1,165	
Total	2,168	2,788	28.59
8. Engineering & technical colleges			
Indiana Institute of Technology	1,363	1,111	
Rose Polytechnic Institute	466	938	
Tri-State College	1,531	1,859	
Total	3,360	3,908	16.30
9. Religion & theological schools			
St. Meinrad Seminary	272	271	
Fort Wayne Bible School	323	473	
Total	595	744	25.04
Other Totals			
10. State universities (Public)	39,936	58,944	
Vincennes	618	2,188	
Total	40,554	61,132	50.74
11. Regional	11,234	22,479	
12. Total Public Groups 10 & 11	51,788	83,611	61.44
13. Total Private Groups 4-9	32,996	41,323	25.23
14. Total Public & Private Groups 12 & 13	84,784	124,934	47.35

SOURCE: Enrollment figures were taken from Nelson M. Parkhurst, Report of Enrollment for Indiana Universities and Colleges (West Lafayette: Purdue University, 1968). This report was prepared for the Indiana Association of Collegiate Registrars and Admission Officers.

group of young people of all social and economic levels. The task of providing low-cost, accessible colleges and universities will no doubt fall to the public institutions.

As Table 20 indicates, there is not a tremendous difference between the percentage of students attending local private institutions in their home counties and those attending public institutions in their home counties. In private institutions 23.5 percent of the total enrollment come from the county in which the institution is located, compared with the public institutions' enrollment of 27.2 percent local students. However, the big difference between public and private institutions is in the portion of their enrollment that comes from the "rest of the state." While public institutions have 49.2 percent, private institutions have only 16.8 percent. In addition, public regional campuses have a larger portion of local students in their total enrollment than do the main campuses of the state universities. In the state universities 12.8 percent of the undergraduate student body is from the same county, and in the other state-supported campuses 61.5 percent come from the same county. This latter percentage is even higher when the regional campuses are considered alone. Both Vincennes University and the Professional Division of Indiana University in Indianapolis (included in "other state-supported campuses") have lower than average local enrollment as a portion of total enrollment. The regional campuses excluding these two institutions have 66 percent same-county undergraduates, and nearly 80 percent of the undergraduates are from the same and adjacent counties.

The data in Table 20 also help to define the geographic market for institutions that serve a commuting student body. The several categories in Table 20 were developed to help determine the most significant commuting area based on county data. Apparently, the significant category for

TABLE 20

Indiana Institutions of Higher Education by Residence of Undergraduates, 1967-68

Institutional Group*	Number of Undergraduates	Percent from Same County	Percent from Same and Adjacent Counties	Percent from Same Educational Region+	Percent from Rest of State‡	Percent from Out of State
1. State universities	58,943	12.8%	21.4%	21.4%	62.2%	16.4%
2. Other state-supported campuses**	24,866	61.5	74.9	75.4	18.4	6.7
3. Other state-supported campuses (excluding Vincennes Univ. and Indpls. Prof. Div.)	19,009	66.1	79.8	80.3	13.7	6.5
4. Private universities	18,943	26.6	32.7	34.4	12.1	55.2
5. Private colleges--Group I	17,048	22.9	29.8	28.6	21.3	48.9
6. Private colleges--Group II	3,489	30.0	43.0	43.6	17.3	39.7
7. Catholic girls colleges	3,040	24.4	30.8	33.0	13.6	55.6
8. Engineering and technical colleges	3,955	8.9	11.7	13.4	22.1	66.2
9. Religious and theological schools	1,424	13.9	18.4	20.4	15.9	65.7
Total	131,708	25.9	34.7	35.0	37.4	27.9
Total public institutions (1-2)	83,809	27.2	37.3	37.4	49.2	13.5
Total private institutions (4-9)	47,899	23.5	30.2	30.8	16.8	53.0

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*Major institutional groups were defined for purposes of the Indiana Higher Education Facilities Planning Study. See Appendix C for breakdown of groups. No vocational enrollment (group #3) is included in enrollment figures.

+Regions as defined by the Indiana Vocational Technical College. See map in Appendix B.

‡"Rest-of-state" means Indiana students not from same county or adjacent counties.

**Data from Vincennes University and the Indiana University Professional Division are excluded.

SOURCE: Data compiled by N.M. Parkhurst and Betty Suddarth (Purdue University) from admission records of Indiana institutions defining a broader commuting area is "same and adjacent counties." When adjacent county areas are expanding to include an entire region of the state, no large number of additional students results.[7] For example, in the regional campuses, 79.8 percent of the undergraduates come from the same or adjacent county, and 80.3 percent come from the educational region. This implies a limit to the definition of regions to be served by one campus. But this generalization, of course, is not entirely accurate. Some IVTC regions (used in Table 20) are identical to the criterion of "same and adjacent counties." Furthermore, many campuses are located in a county on the state border, but only adjacent Indiana counties are included in this study. Students from counties of neighboring states are merely considered out of state.[8]

The relationships of local enrollment to total enrollment described in Table 20 may be misleading unless they are also examined from another viewpoint. Enrollment composed of a small portion of local students does not mean that the institution is not serving the local demand. For example, of the 2,117 undergraduates from Monroe County attending an Indiana institution in 1967-68, almost 90 percent attended Indiana University. Nevertheless, these Monroe County residents made up less than 10 percent of the university's total undergraduate student body. Similarly, over 70 percent of the local youths who are undergraduates in Indiana institutions stay within the same county in Allen, Delaware, Tippecanoe and Vigo counties, all of which contain public institutions. Although wide variations are concealed by averages, private institutions as a whole have an average of 7.8 percent of the total students from a county enrolled in the local private institution compared with an average 79.4 percent for the four state universities. None of the private school groups (as reported in Table 20) has an average of over 13 percent. These statistics were taken from a table showing all Indiana counties with over 1,000 residents who were Indiana college undergraduates in 1967-68. Of the Indiana counties, only those just mentioned had over 70 percent attending locally. In order to keep the private institutions' enrollment data confidential, the table is not reproduced in this report.

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[7] The regions of the state used in Table 20 are those defined by the Indiana Vocational Technical College, and it differs somewhat from the regions developed by the Indiana University Bureau of Business Research which were adopted as official economic regions of the state (see Bureau of Business Research, Indiana Business Review, Vol. 42 (December, 1967). The purpose of this discussion is to test the validity of any--not just IVTC--regional system (other than one defined in terms of highway miles) for determining a local market for education. For this purpose, the IVTC regions, defined for educational purposes, are proper ones to examine. Furthermore, the comparison is helpful in analyzing regional data from the 1969 high school senior questionnaire, which is divided by IVTC region.

[8] Out-of-state students were not reported by county of residence.

Similar calculations show that of all the Marion County students enrolled somewhere in Indiana in 1967-68, almost 55 percent were enrolled in their own county (for undergraduates only, 49 percent). Such a figure serves as a measure of the number who are served locally and of the potential enrollment. For example, even though Marion County has three private institutions as well as the Indiana University-Purdue University complex, some students still prefer to leave the county. The counties where the four public universities are located, however, have a higher portion of students from the county attending locally. As the public campuses in Indianapolis expand their offerings, a larger portion of youths probably will remain in the county for higher education.

In summary, the percentages of county undergraduates to total enrollment, as shown in Table 20, do not necessarily show whether or not the institutions are serving the local youths. They do show, however, whether the different groups select their student bodies primarily from the local market, the state as a whole, or from outside Indiana. As might be expected, the regional campuses' enrollments are primarily local, with 66 percent from the same county and 80 percent from the same region of the state. Surprisingly, even on regional campuses an average of 13.7 percent come from Indiana counties that are not "same and adjacent" and 6.5 percent of the students come from out of state.

STUDENT PROFILES

A profile of the characteristics and interests of students in various institutions offers additional information about the educational demand being served by present institutions of higher education. Fortunately, two such studies of the student bodies of public regional campuses, our major area of concern, are available. One is a study of the students enrolled in Indiana University's Division of General and Technical Studies (DGTS) in Fort Wayne. The other student profile is derived from a questionnaire distributed to Indiana University regional campus students in 1967 by the Indiana University Division of Regional Campuses.

These studies,combined with the answers to the 1969 high school senior survey, improve our understanding of the students now enrolling in Indiana's institutions. Perhaps more significantly, this spotty information gives an indication of the kind of data that, if developed more fully for all institutions, might help to define effective demand more thoroughly. With an understanding of effective demand, we will have a better idea of what types of youths are still not served by present institutions and what kind of institution could most appropriately provide them with higher education in the future.

One caution is in order. Only the 1967 Indiana University regional campus student profiles are available, and the type of student served by these campuses in 1967 is by no means the limit to the institutional capacity. In fact, these campuses are changing rapidly and, with an adequate budget, would be very flexible in meeting the expanding demands of the people of the state. The fact that a portion of the college-age population is unserved does not necessarily imply a need for additional institutions unless it can be established that these potential students represent a geographic demand that could be served only by additional locations.

The campus of the Indiana University Division of General and Technical studies in Fort Wayne is of interest because it resembles a type of post-secondary education frequently recommended for the state as a whole. The DGTS campus has only been in operation since 1966 and is still expanding in terms of program offerings. Nevertheless, in 1968 the DGTS campus had an enrollment of 681. Because it offers both general and technical studies, DGTS resembles the combination of academic and vocational programs recently recommended for state community colleges by the State Policy Commission of Post High School Education.[9] DGTS does not have admission requirements identical to the Indiana University main campus, as is typical of regional campuses, and DGTS credits are not automatically transferred for academic credit.

A look at the student body of this school, which is located in a city with two private colleges, a private technical college, and a regional campus representing both Indiana University and Purdue, may suggest the type of student body that would be attracted to similar schools in other Indiana cities that have other institutions of higher education. Fortunately, DGTS has a detailed description of its student body, and these data add to our analysis, although comparison is impossible without similar data from the larger public campuses.

During the fall semester of the 1967-68 academic year, 154 new students enrolled for full-time study with Indiana University's Division of General and Technical Studies in Fort Wayne. Using a short questionnaire in combination with the students' application forms and registration forms, Wade Fredrick, the Director of Admissions, summarized the new student characteristics:

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[9] A community college may differ to any extent desired by the school and its contingency, and so it is useless to propose a definition here. We emphasize merely that it represents a combination of vocational and academic schooling recommended for Indiana by the 1968 State Policy Commission and by various other groups. See Report of the State Policy Commission on Post High School Education, pp. 70-74.

> Taking a look at the "average" full-time (12 hours or more) student at the Division of General and Technical Studies the fall semester of 1967-68, we find that the student is somewhat more likely to be a male (89 to 65) from the city of Fort Wayne. He is likely to come from a relatively large family where the parents have completed high school but have seldom attended college. In the majority of cases, both of the student's parents work outside the home, and the father's employment is most likely to be of a non-professional nature.
>
> The student himself is most likely to have pursued the college preparatory course in high school and to have graduated somewhere in the middle 50% of his class. The odds are 2 to 1 that he holds some type of outside monetary employment while attending school as a full-time student. He comes from what a sociologist would describe as a predominantly middle-class background and reflects the values of that general group.[10]

Appendix D contains the complete results of this survey. Of special interest is the fact that out of 154 new students, 115 were from the city of Fort Wayne and a total of 141 (or 92 percent) from either Allen County or an adjacent Indiana county. As the report states, this "seems to substantiate the Division's current role as a 'community college' serving primarily students from the immediate area." In 1968, the total enrollment of 681 included 398 students from Allen County and only 16 from out of state (no specific breakdown on adjacent counties is available).

This study presents some indication of the socioeconomic characteristics of the student body. The type of work done by the father was described by the student and categorized by the researcher. The largest number of students came from homes where the father was a "laborer-unskilled" (48), or worked in a "supervisory-industrial" capacity (18), or was "self-employed" (25).

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[10] See Appendix D.

In addition, the study presents some general information about the entire student bodies in 1967 and 1968 (Table 21). Of 67 new full-time students who had outside employment, 41 worked over 20 hours (this does not include 22 X-ray students who worked at their respective hospitals). The student body (both full- and part-time students) is only slightly weighted towards males. The age groupings include a surprisingly large portion of students over 30 years of age (18 percent in 1967 and 20 percent in 1968) and about one-half are over 20 years old. Over half of the student body is enrolled for less than full time (12 or more hours), with an especially large group taking 3 hours of course work.

During the 1967-68 school year, the Indiana University Regional Campus Administration conducted a questionnaire survey of its student body, and received responses from 13,740 students. Although the survey contains little information about the socioeconomic characteristics of regional campus students, it does present some interesting information about the students' backgrounds. An average of 35 percent of the regional campus students finance their studies primarily through work during the academic year, and 44 percent of the students work over 35 hours a week. The students are about evenly divided between male and female, and 38 percent of them are married. Almost half live with their parents. A large majority of the students are Caucasian, with an average of only 5 percent Negroes at the various campuses. However, about 10 percent of the students on the Indianapolis and Northwest campuses are Negro.

Eighty-one percent of the students said that they were actively working toward a degree. Forty-four percent planned to complete their degree on the same regional campus, and 34 percent intended to obtain their degree at the main I.U. campus. In response to the question, "If you could choose,

TABLE 21

Characteristics of Student Body, Indiana University Division of General and Technical Studies, 1967 and 1968

				Percentages	
Sex	**1967**	**1968**		**1967**	**1968**
Male	223	379		55%	56%
Female	182	302		45%	44%
Total	405	681		100%	100%
Age Groupings					
20 or under	240	327		59%	48%
21-30	93	218		23%	32%
31-40	34	75		8%	11%
41-50	30	42		7%	6%
50+	8	19		2%	3%
Total	405	681		100%	100%
Course Load					
1.5 hours	30	31			
2	11	43			
3	104	194	1-5 hrs.	38%	46%
4	0	3			
5	8	15			
6	46	57			
7	3	6	6-9 hrs.	18%	12%
8	7	15			
9	16	23			
10	0	2			
11	2	15	10+ hrs.	44%	43%
12 or more	178	277			
Total	405	681		100%	100%

SOURCE: Division of General and Technical Studies, Indiana University, Bloomington, Indiana.

where would you rather go to college?" 44 percent of the students answered they would choose the regional campus. In addition, when asked what their college plans would be if the regional campus did not exist, only 13 percent of the respondents said that they would not attend college. The largest number (36 percent) answered that they would go "elsewhere"; an additional 24 percent stated that they would go to Bloomington (Indiana University); and 8 percent responded that they would go to Purdue (presumably to both the main and regional campuses).

As for the regional character of the student body, over 63 percent said they were "quite certain" that they would live permanently within the region served by the campus, and only 13 percent said this was not very likely.

The final section of Appendix E reports answers to question 16, "In one or two sentences would you please indicate on the back of the answer sheet why you chose to attend this regional campus as opposed to some other school or location." Since this type of question allows a variety of responses, the research divided the answers into four categories: academic considerations, location, financial considerations, and other. Considerations of location ranked highest with 40 percent responding that location influenced their choice of campus the most. Location reasons included proximity to the students' residence and job, ease of transportation, and preference for the urban area. They also included work opportunities in the area, family responsibilities or health problems preventing relocation, and preference for a nonresident campus. The "other" category included a number of answers for "unspecified convenience" and "unspecified necessity," which might also be related to location.

In the case of commuter campuses, reasons of location are particularly difficult to separate from financial considerations. In summary, however, financial considerations were considered to include responses such as "lower tuition," "employment," "fee couresy," and, most frequently, "freedom from room and board expenses [often related to location]." Only 20 percent of the total group noted such financial considerations.

At every campus, academic considerations were rated higher than financial considerations, especially at the Indianapolis and Fort Wayne campuses. On the other hand, location considerations were especially high at the Kokomo and Northwest campuses. On the South Bend and Southeast campuses, financial considerations were ranked higher than average and almost equaled academic considerations.

CONCLUSION

This discussion of regional variation in student demand and institutional supply in Indiana presents a background for the discussion of some enrollment projections for regional institutions that will be presented in Part II. Of course, policy decisions regarding resources to be devoted to regional institutions will be a major influence on future enrollment. Hopefully, some of the Indiana data presented here may be helpful in forming policy. In addition, this presentation suggests several areas where further information on Indiana students might aid in the policy-making and enrollment-projection processes.

IV. POTENTIAL FOR FUTURE ENROLLMENT

Much of the potential for future enrollment growth in institutions of higher education comes from the groups that have to date participated the least in higher education. Since youths from high socioeconomic backgrounds or with high ability levels already participate to a great extent, much of the potential growth in enrollment lies in the lower socioeconomic status (SES) and ability groups. For example, the present probability of college entrance by socioeconomic status and family size and the percentage of freshmen in each SES and ability group are shown in Table 22. Not only do the low-SES, low-ability groups represent the greatest number of potential students (those not now attending), but they also serve as the target for specific educational goals in many state and federal programs. Furthermore, in order for college enrollment to reach the large totals being projected, these groups must be tapped. For example, although the Indiana college population age group (between 18 and 21 years old) in 1985 will be no larger than it was in 1970 (having reached a peak in 1976), enrollment projections are substantially higher for 1985.

Of course, Indiana need not gear its future educational program for serving the lower-SES and lower-ability groups. The state might decide, for example, to concentrate on developing increased participation by those with high ability. However, to serve the large numbers of youths in the large potential groups, a specific type of public educational program should be developed. In particular, vocational education should be available for youths, especially those in the lower-ability groups who

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[1] Table 22 is based on a major national study (Project TALENT). For indications of Indiana participation by SES and ability groups, see the discussion of 1969 high school senior survey in Part I of this study.

TABLE 22

Socioeconomic Factors and College Entrance

Probability of Entrance to College, Full- or Part-time, in the Year of High School Graduation, by Socioeconomic Status and Family Size

Size of Family	(High)	SES		(Low)
	1	2	3	4
2-4	68.7	43.1	31.1	16.3
5-6	62.8	38.7	26.4	14.1
7-8	55.1	34.8	20.0	10.6
9-11	53.4	26.0	20.5	10.6
12 or more	41.2	25.5	10.8	7.4

Distribution (Percent) of Freshmen Entering 4-year Public and Private Colleges, in the Year of High School Graduation, Full-time and Degree Credit, by Socioeconomic Status and Ability

Ability	(High)	SES		(Low)	Total
	1	2	3	4	
1 (High)	20.5%	12.2%	8.0%	2.4%	43.1%
2	10.3	8.0	5.9	2.5	26.7
3	5.7	4.8	3.5	2.0	16.0
4	2.0	2.5	2.3	1.6	8.4
5 (Low)	1.0	1.1	1.7	2.0	5.8
Total	39.5	28.6	21.4	10.5	

SOURCE: Project TALENT, 5-year followup surveys. Cited in U. S. Department of Health, Education, and Welfare, Toward a Long-Range Plan for Federal Financial Support for Higher Education (Washington: U.S. Govt. Printing Office, January, 1969), p.54.

seek to prepare for special jobs by obtaining schooling beyond high school. Furthermore, local educational facilities might be provided to make higher education more accessible to the lower-income groups in population centers. In fact, the demand for regional education might be considered the demand for commuter-type institutions that provide vocational and general offerings.

VOCATIONAL EDUCATION

Indiana was slow in starting its public vocational schools. The Indiana Vocational Technical College (IVTC) was created by the 1963 state legislature, but it did not receive any substantial funding until the 1965 General Assembly. However, the 1969 General Assembly cut its proposed budget significantly. Although a jurisdictional dispute at present leaves the future of IVTC uncertain, Indiana can be expected to continue both secondary and postsecondary vocational education in some form.

The emphasis of postsecondary enrollment in vocational education varies considerably throughout the United States. One study (shown in Table 23) indicates the degree of participation of the various states in 1966 when Indiana's IVTC was just beginning. Indiana ranked last among the states with a program for vocational education when enrollment as a percent of the 20-24 age groups population was considered. (Only Rhode Island and the District of Columbia were lower, and they had no participants.) The study notes:

> A substantial number of students were either beginning or continuing their vocational preparation in post-secondary institutions. These institutions were identified under such names as area schools, technical institutes, and junior or community colleges.
>
> Beginning in 1965, data were gathered for the first time to show enrollment in post-secondary schools. For data collection purposes, the post-secondary school was defined as one whose program included students who had completed or left high school and who were 'available for full-time study in preparation for entering the labor market.' Simply stated, the

TABLE 23

Postsecondary Enrollment in Vocational Education Compared with Population in the 20-24 Year Age Group, by States, Fiscal Year 1966

	Population, 20 to 24 Years* July 1, 1965	Postsecondary Vocational Enrollment, 1966+	Postsecondary Vocational Education Enrollment as a Percentage of the 20 to 24 Age Group
Total	13,552,000	442,097	3.26%
Alabama	267,000	2,345	0.8839
Alaska	25,000	163	0.6542
Arizona	117,000	2,891	2.4715
Arkansas	151,000	3,127	2.0718
California	1,313,000	155,171	11.8220
Colorado	139,000	7,302	5.2550
Connecticut	184,000	3,050	1.6623
Delaware	33,000	--	--
District of Columbia	48,000	1,129	2.3616
Florida	396,000	17,865	5.6440
Georgia	356,000	3,641	1.0235
Hawaii	65,000	2,442	3.7690
Idaho	50,000	962	1.9319
Illinois	663,000	3,673	0.5545
INDIANA	318,000	771	0.2449
Iowa	171,000	1,815	1.0632
Kansas	148,000	2,555	1.7122
Kentucky	241,000	1,823	0.7541
Louisiana	261,000	12,800	4.9570
Maine	68,000	803	1.1830
Maryland	254,000	2,276	0.8937
Massachusetts	344,000	3,619	1.0533
Michigan	534,000	19,472	3.6510
Minnesota	225,000	5,079	2.2617
Mississippi	187,000	2,646	1.4127
Missouri	293,000	1,977	0.5943
Montana	48,000	1,249	2.6113

(continued)

Nebraska	93,000	1,395	1.5024
Nevada	34,000	291	0.8540
New Hampshire	47,000	853	1.8120
New Jersey	439,000	1,165	0.2748
New Mexico	70,000	639	0.9136
New York	1,128,000	29,749	2.6312
North Carolina	415,000	7,261	1.7521
North Dakata	48,000	2,507	5.2360
Ohio	637,000	3,708	0.5844
Oklahoma	179,000	2,074	1.1531
Oregon	134,000	4,617	3.4511
Pennsylvania	724,000	3,300	0.4546
Rhode Island	62,000	--	--
South Carolina	227,000	3,224	1.4426
South Dakota	44,000	391	0.8938
Tennessee	296,000	3,056	1.0334
Texas	775,000	19,494	2.5214
Utah	75,000	3,463	4.6280
Vermont	28,000	386	1.3828
Virginia	365,000	4,932	1.3529
Washington	203,000	55,854	27.5110
West Virginia	124,000	496	0.4047
Wisconsin	260,000	28,468	8.4430
Wyoming	21,000	314	1.4925

* U.S. Department of Commerce, "Population Estimates," Series P-23, No. 350 (Washington, D. C.: U.S. Government Printing Office, October 5, 1966), Table 1.

+ Data supplied by the Division of Vocational and Technical Education, U.S. Office of Education.

SOURCE: U.S. Senate, Committee on Labor and Public Welfare, Subcommittee on Education, "Notes and Working Papers Concerning the Administration of Programs Authorized under Vocational Education Act of 1963," 90th Congress, Second Session (Washington, D.C.: U.S. Govt. Printing Office, March, 1968), pp. 366-67.

admission criteria for determining programs eligible were:

> 1. The individual must be available for full-time study.
> 2. The individual must have completed or left high school.
> 3. The individual is not in the labor force on a full-time basis.

The study further notes:

> In 1965, 207,201 students were identified as post-secondary and in 1966, 442,097. The States varied considerably in enrollment in post-secondary programs. Some States had previously developed vocational education programs in post-secondary institutions. Area schools that were developed in some States after 1958 were devoted largely to vocational programs in the post-secondary area. California, whose junior college law was passed in 1907, had defined this institution as a part of the public secondary school program and, as a result, substantial development of vocational education already had taken place by 1963.
>
> That the States vary in the extreme in enrollment in post-secondary programs of vocational education is not as significant, therefore, as the fact that these programs are showing extraordinary growth.[2]

Indiana might use the national or regional 1966 average as a measure of the potenetial for postsecondary vocational education in the future. Projections based upon the assumptions that Indiana will reach this average by either 1975 or 1985 are presented in Table 24.[3]

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[2] U.S. Senate, Committee on Labor and Public Welfare, Subcommittee on Education, "Notes and Working Papers Concerning the Administration of Programs Authorized under Vocational Education Act of 1963," 90th Cong., Second Sess. (Washington, D. C.: U.S. Govt. Printing Office, March, 1968), pp. 366-67.

[3] The 20-24 year old population age group was used by this study because it is available from the U.S. census and is the most appropriate measure. The 18-21 college age group is not available for state comparisons. Likewise, our Indiana projections are based upon the 20-24 age group and are presented by economic region because comprehensive projections are available.

TABLE 24

Indiana Regional Enrollment in Postsecondary Vocational Training If 1966 National Average or Nearby State Average Equaled by 1975 and 1985

A. Postsecondary enrollment in vocational education, compared with population in 20-24 age group*

National average		3.26%		
Region V average+		2.69%	Rank of States	(Nationwide)
Indiana	.24		49	51 Total
Illinois	.55		45	(including District
Ohio	.58		44	of Columbia)
Wisconsin	8.44		3	
Michigan	3.65		10	
	13.46 / 5	= 2.69%		

B. Indiana Economic Regions

	Population 20-24 Age Group			Postsecondary Vocational Educational Enrollment			
				National		Regional	
Economic Region‡	1965	1975	1985	1975	1985	1975	1985
Gary	42,969	69,878	91,962	2,278	2,998	1,880	2,474
South Bend	31,813	45,749	44,389	1,491	1,447	1,231	1,194
Fort Wayne	30,200	46,390	49,007	1,512	1,598	1,248	1,318
Lafayette	19,653	22,127	25,054	721	817	595	674
Kokomo	15,841	21,688	24,356	707	794	583	655
Muncie	32,808	43,513	46,458	1,419	1,515	1,170	1,250
Terre Haute	13,952	16,987	17,712	554	577	457	476
Indianapolis	65,801	102,520	114,475	3,342	3,732	2,758	3,079
Richmond	15,383	21,340	21,587	696	704	574	581
Bloomington	12,493	12,276	13,259	400	432	330	357

(continued)

Economic Region‡	Population 20-24 Age Group			Postsecondary Vocational Educational Enrollment			
				National		Regional	
	1965	1975	1985	1975	1985	1975	1985
Columbus	9,292	13,174	14,384	429	469	354	387
Evansville	27,733	40,819	41,309	1,331	1,347	1,098	1,111
New Albany	16,400	22,896	23,888	746	779	616	643
TOTAL	343,575	492,561	523,624	15,627	17,208	12,895	14,199

* The 20-24 age group was used for comparisons in the national study because census data are grouped according to this age group. College age (18-21) data were not available for comparisons.

+ Region V is defined by the U.S. Office of Education.

‡ The Indiana University Bureau of Business Research's definition of the economic regions was used because population estimates were thus available.

SOURCES: Part A is based on "Notes and Working Papers Concerning the Administration of Programs Authorized under Vocational Education Act of 1963." Part B is taken from Bureau of Business Research, Indiana University, "Indiana Population Projections 1965-1985" (Bloomington, Ind.: September, 1966), Series A.

The national average for postsecondary vocational education in 1966 was 3.26 percent of the 20-24 age group, with wide variations as noted in Table 23. If Indiana reached this average by 1975, its vocational enrollment would be 15,627; if the national average were reached by 1985, enrollment would be 17,208.

The regional average is based on Region V (as defined by the U.S. Office of Education) which includes Indiana, Illinois, Ohio, Wisconsin, and Michigan. Indiana had the lowest percentage (.24 percent) of the age group participating, and Wisconsin had the highest (8.44 percent). The average, again with wide variations, was 2.69 percent. To reach this average by 1985, Indiana would need 14,199 people enrolled in postsecondary vocational education. On the other hand, to reach Wisconsin's 1966 level by 1985, Indiana would need 44,194 enrolled in postsecondary vocational education.

Actual enrollment (part-time, full-time, and noncredit students) in the public IVTC schools in 1968 was 4,252. Estimates as high as 100,000 students have been made for 1985. The 100,000 estimate is based on an assumption that vocational schools will train one-half of the state manpower needed to fill jobs available in trade, skill, and technical areas by 1985.[4]

Table 25 shows enrollment in IVTC for 1967 and 1968 in the various IVTC regions and compares this enrollment with the 18-21 age group of the county and with the undergraduate enrollment in Indiana institutions of higher education from that county. On the basis of both age group

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[4] Estimates made by Booz, Allen & Hamilton for Indiana Vocational Technical College. See 1967 Indiana Manpower Research Conference Proceedings (Indianapolis: Indiana Employment Security Division, 1968), p. 163.

TABLE 25

Postsecondary Vocational Enrollment (IVTC) Compared with 18-21 Age Group and Number of Undergraduates from County of Vocational School Location

	Total Enrollment*		County 18-21 Population (1969)		County Undergraduates (1967)	
IVTC Regions	1967	1968	Amount	% of Highest+ Enroll.	Amount	% of Highest+ Enroll.
1. Michigan City (La Porte)	0	31+	7,000	0.4%	2,160	1.4%
2. South Bend (St. Joseph)	0	1,298+	19,303	6.7	5,163	25.1
4. Lafayette (Tippecanoe)	29+	19	7,005	0.4	2,195	1.3
5. Kokomo (Howard)	239+	177	5,545	4.3	1,458	16.4
7. Terre Haute (Vigo)	215	284+	9,244	3.1	2,847	10.0
8. Indianapolis (Marion)	1,514+	1,492	53,603	2.8	16,895	9.0
9. Richmond (Wayne)	219+	56	6,428	3.4	1,388	15.8
10. Columbus (Bartholomew)	0	67+	3,429	2.0	1,051	6.4
11. Versailles (Ripley)	0	189+	1,799	10.5	321	58.9
12. Evansville (Vanderburgh)	0	110+	15,228	0.7	5,081	2.2
Other Fort Wayne (I.U.-DGTS)	405	681+	18,218	3.7	4,647	14.7
Total state IVTC	2,216	4,252	350,119	1.2	98,098	4.4

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*Total enrollment includes credit (full-time and part-time) plus noncredit students.

+"Highest" enrollment means largest IVTC enrollment, either 1967 or 1968.

SOURCE: IVTC enrollment from State Policy Commission on Post High School Education, An Indiana Pattern for Higher Education (December, 1968), p. 55.

and percent of undergraduates, the IVTC courses in Region II (Versailles in Ripley County) had the largest percentage of county participation. Vocational enrollment as a percent of undergraduate college enrollment from that county was especially high (59 percent) for several possible reasons. Ripley County has a small college participation rate (17.8 percent of the 18-21 year age group in 1967), as do other counties in the region. The region, in fact, ranks last in the state for average undergraduate participation.[5] This leaves a large portion of potential students for vocational training (as well as a small base of undergraduates for comparison). Since the region is sparsely populated and relatively isolated from public institutions of higher education (it is the only IVTC region without a public university or regional campus), many of the vocational students come from throughout the region, and the comparison with Ripley County statistics is somewhat inappropriate. The other IVTC schools are located in larger cities and more heavily populated areas, and the IVTC students can be expected to represent primarily youths from the same county. For example, we noted that new students in 1967-68 at the Indiana University Division of General and Technical Studies in Fort Wayne included 75 percent who came from the city and 92 percent who came from Allen County or an adjacent Indiana county.

In the first year of enrollment (1968) the South Bend IVTC school in Region 2 obtained 6.7 percent of the county 18-21 age group. Kokomo, Terre Haute, Indianapolis, and Richmond had between 2.8 percent and 4.3 percent vocational participation by the 18-21 age group. If programs develop and the budget is sufficient, it is not unreasonable to expect 10 percent of the county age group to attend vocational schools. For the counties shown in Table 25, this would mean an enrollment of about 15,800 by 1975 and 13,800 by 1985. If Lake and Delaware counties were also included, the 10 percent local enrollment for these counties and the others would be 22,400 by 1975 and 19,300 by 1985. If the state were to reach this 10 percent enrollment of the 18-21 age group in vocational education (which would mean an average 10 percent from all counties, presumably with much higher rates in some), the total 1975 enrollment would be 42,163 and the 1985 enrollment would be 37,123, even with the drop in the 18-21-year-old population.[6]

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[5] See Tables 4 and 5 in Part I.

Projections on the basis of age group alone are imperfect, regardless of the age group chosen. We noted for Indiana University's DGTS in Fort Wayne, for example, that 52 percent of the 1968 students were 21 or over, and 20 percent were over 30. However, problems in projecting vocational enrollment for Indiana are even more extensive. Since the enrollment for most of these vocational schools comes primarily from a commuting area, the projected total depends upon the number and location of future vocational schools. An additional problem exists in predicting total higher education enrollments. In the projections that follow, we will examine the possible influence of the establishment of public two-year institutions of higher education in the state on total enrollment. Two-year institutions often have a sizable portion of their programs geared toward vocational and technical studies as well as academic studies. Although in some of the heavily populated areas several schools (even several vocational schools) would find adequate enrollment demand, the total impact of IVTC cannot be expected to be the same if an alternate system is developed.

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[6] The 18-21 age group discussed here is based upon actual births adjusted for mortality rates, and this college-age population for Indiana is expected to decline from 421,632 in 1975 to 371,234 in 1985 (see Parkhurst and Suddarth, "Enrollment Projections," Table 5). On the other hand, the figures available from the census are for the 20-24 age group. This census age grouping has been projected in an Indiana population study by the Indiana University Bureau of Business Research and can be used for comparison with the U.S. Office of Education vocational education statistics shown in Table 24, although this is not the age group typically considered college age. The Indiana 20-24 age group is projected to increase slightly from 492,561 in 1975 to 523,624 in 1985 (Series A assumes no net migration and slightly declining mortality rates).

In the projections that follow, we assume that two-year institutions will reduce the enrollment totals of public vocational schools. The IVTC effort might be combined with two-year institutions in some areas, although this is not an essential assumption. For sparsely populated areas and counties without a two-year institution, local vocational training might still attract a significant portion of local youths. These areas would not offer the potential enrollment to support comprehensive schools at a reasonable cost to the state, but they can support vocational programs. Therefore, it is assumed that some public vocational schools will remain even if two-year institutions are established.

One further alternative should be considered: the possibility of comprehensive vocational schools, with a combination of vocational and general studies. A trend toward including general studies in vocational schools was recently noted by the U.S. Advisory Council on Vocational Education. At a three-day session in Washington, the council staff and ten noted educators representing vocational education programs discussed new directions for vocational education. Following are some of the observations and recommendations made at that meeting:

> While there were marked differences among the projects in terms of content, organization, educational level of the program, type of population to be served, approach, and methods employed, there were also commonalities. Through conference and discussion, the representatives identified what they felt were common elements of the programs and might be considered as indications of trends.

Among the most significant trends cited were "more comprehensive programs in which the disciplines are brought into interaction to maximize reinforcement and to highlight the relatedness of the disciplines" and "programs which recognize that the separation of vocational and general education detracts from both and when they are brought together, they serve to improve and enhance each other."[7]

Several of the recommendations of the Advisory Council on Vocational Education are of interest in viewing the future of vocational education. It was recommended that at least 25 percent of the federal funds allocated to the states for vocational training be used for postsecondary schools and adult programs. In addition, there was a recommendation for permanent authority to make grants for residential vocational schools. "The need is especially critical in sparsely populated rural and urban disadvantaged areas." The council also recommended expanded programs and services specifically designed for persons who have academic, social, economic, or other handicaps. Finally, the council urged that postsecondary opportunity grants be made to students interested in entering technical and vocational programs.

The future direction of postsecondary vocational education in Indiana is difficult to predict. It is obvious that there is a large core of potential students and a need for increased technical training, for Indiana has lagged behind most other states in this area. The direction of federal support will influence future decisions. Likewise, the emphasis given vocational education by the Indiana General Assembly and the funds made available will directly affect the size of enrollment that can be attained. Furthermore, jurisdiction of the postsecondary vocational program is a subject of dispute.

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[7] U.S. Senate, Committee on Labor and Public Welfare, Subcommittee on Education, "Notes and Working Papers Concerning the Administration of Programs Authorized Under Vocational Education Act of 1963," 90th Cong., 2nd Sess. (Washington D. C.: U.S. Govt. Printing Office, March, 1968), p. 358 and pp. 366-67.

With these unknowns, we will attempt to project only the potential in terms of (1) greatly expanded vocational training by 1985 (we use 37,000 or 10 percent of the 18-21 age group) and (2) the effect of a new system of two-year institutions that offer vocational and technical studies in some of the largest population counties. New institutions are assumed to reduce but not eliminate the need for vocational schools. Even in the counties with two-year institutions, we assume that only one-half of the vocational students (5 percent of the age group) will enroll in the two-year institutions. This assumption allows for vocational schools in major counties in addition to two-year institutions and for vocational schools in counties without public academic institutions.

TWO-YEAR INSTITUTIONS

The growth of two-year institutions of higher education, typically called junior colleges or community colleges, is well documented. Many states (including Illinois, Iowa, Michigan, and Wisconsin in the Midwest) have followed the leadership of California and have adopted junior college systems. Two-year institutions are expected to include an ever-increasing portion of total public enrollment in higher education. The U.S. Department of Health, Education, and Welfare, for example, estimates that:

> First-time enrollment in 2-year institutions represented 21 percent of all first-time degree-credit enrollment in 1955, 28 percent in 1965, and is expected to be 31 percent by 1975.
>
> The enrollment of men accounted for 61 percent of first-time degree-credit enrollment in 2-year institutions in 1955, 60 percent in 1965, and 59 percent in 1975. Public institutions claimed 84 percent of first-time degree-credit enrollment in 2-year institutions in 1955, 87 percent in 1965, and a projected 88 percent in 1975.[8]

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[8] U.S. Department of Health, Education, and Welfare, Office of Education, Projections of Educational Statistics to 1975-76 (Washington: U.S. Govt. Printing Office, 1966), p. 3.

Indiana naturally does not fare well by comparison with national trends in the development of two-year institutions. Indiana has only one strictly two-year institution. In 1967 Indiana institutions awarded 646 associate in arts degrees (a two-year degree), or about 4 percent of the number of bachelor's degrees awarded in the state that year. However, Indiana's structure of higher education is not easily compared with that of other states. If enrollment on the 12 regional campuses of the state universities is examined, Indiana, in fact, has a high percentage of total enrollment in such institutions.[9]

The 1968 freshman student census indicated that regional campuses enrolled 41.2 percent of the Indiana freshmen enrolled in Indiana public institutions. When both public and private institutions are considered, the figure for Indiana freshmen in Indiana institutions enrolled in regional campuses becomes 32.7 percent. If total enrollment in Indiana institutions, including both Indiana residents and out-of-state students, is considered, the regional campuses still accounted for 26.5 percent of the freshman class in 1968. In addition, if the enrollment in Vincennes University and the Eastern Indiana Center at Earlham is added to the regional campus enrollment, freshman enrollment in these institutions constitute approximately 31 percent of total freshman enrollment in the state's institutions of higher education. This latter figure can be compared with the Department of Health, Education, and Welfare's estimate of 28 percent of first-time degree credit enrollment in two-year institutions in 1965. In this regard, Indiana's 31 percent is not out of line with the national average (at least to the extent that the figures can be compared).

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[9] The regional campuses, of course, are not solely two-year institutions, and the freshman enrollment is not entirely degree-credit enrollment that can be compared to the statistics of the Department of Health, Education, and Welfare presented above.

Obviously the comparison is not exact, for most of the Indiana freshmen in regional campuses and similar institutions are not enrolled in a two-year degree program. Nonetheless, the regional campuses are Indiana's alternate to two-year institutions, and they (and Vincennes University) did involve a large share of Indiana freshmen in 1968. This comparison does not include the enrollment in IVTC, which is another alternative to two-year institutions. To say that Indiana has a small portion of its students in two-year institutions and to project enrollments based on national averages (perhaps 31 percent by 1975) would be meaningless. In fact, since Indiana's educational structure is unique, projections involving additions to the system must also be unique. For that reason they must be somewhat less precise than if the figures could be based on statistics from a comparable state.

This difficulty in applying statistics from other states' junior college systems was pointed out in a recent study. Wide diversity was found between what attracted students to 79 junior colleges in different geographical regions. The percentage of respondents checking various attractions at their college varied as follows:

Intellectual atmosphere	25-70%
Social opportunities	16-66
Special curriculum	21-72
Low cost	13-68
Close to home	5-71

The author concludes:

> It appears that even two-year colleges differ from each other to such a large degree and on so many characteristics that extreme caution should be employed in generalizing from one junior college to the next. Indeed, if educational research is expected to play an important role in junior college planning and policy-making, it appears necessary that provision be made to conduct such research in the local setting.[10]

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[10] Donald P. Hoyt, "Description and Prediction of Diversity among Junior Colleges," Personnel and Guidance Journal, Vol. 46 (June, 1968) p. 1,002.

It would appear that an important characteristic of two-year institutions is that they offer commuter-type education for those who cannot afford to attend a residential college or do not choose to do so. To the extent that ability to commute is the reason that two-year colleges are chosen by a large portion of students throughout the country, Indiana's regional campuses do, in fact, offer a similar alternative. Differences between student enrollment in extension centers of universities or in junior colleges are more likely affected by student cost and admission standards than by degrees offered. Although Indiana's regional campuses vary extremely from the idealized no-cost, "open door" junior colleges, so do most of the two-year institutions in other states; awarding more two-year degrees will not change these differences.

The regional campuses obviously serve as commuter colleges, since residential facilities are not available. Further evidence that students view the regional campuses much as they would a two-year college comes from replies to the Indiana University regional campus questionnaire reported in Appendix E. This study found that 38 percent of the students planned to complete their degrees at a state university; these students thus seem similar to transfer students at junior colleges.

The Indiana system of public education should be examined in relation to other alternatives acceptable to students and in relation to the costs of lowering standards, reducing student costs, offering more programs or degrees, or building more campuses. The success of junior colleges in other states, although an important indication of student demand, do not necessarily indicate that these same enrollment demands cannot be satisfied by other systems.

As a study of higher education in Kentucky noted:

> Uniformity is the enemy of the human spirit; diversity is the strength of American higher education. There is no compelling reason at all why all public two-year colleges should be regimented under a centralized administration . . . . It is not uncommon for a state to have two or more distinct "systems" of public two-year colleges. Ohio, for example, has numerous two-year branches of its several state universities, and also two locally-based large two-year colleges located respectively in Cuyahoga and Lorain Counties (cities of Cleveland and Elyria). A statute authorizes local support and control of this latter type, and sets up a statewide Community College Board to provide encouragement and leadership at the state level.
>
> Pennsylvania has long had numerous local two-year branches of the Pennsylvania State University, and now has also two large locally-based two-year colleges located respectively at Harrisburg and Philadelphia, under enabling statutes somewhat similar to the Ohio community college law.
>
> The recommendations of this report envision for Kentucky at least three types of local public two-year colleges . . . . It is fortunate that the whole pattern is multifold and diverse. There is no evidence that any advantage, either academic or financial, would be derived by reducing it to a uniformity that is impracticable on its face, that would minimize the range of choice, and that no one wants.[11]

In many states, unless strictly prohibited by a state system, two-year institutions were expanded to four-year institutions when enrollments increased and local students demand was evidenced. This has been true of Indiana's regional campuses. In the major metropolitan areas the enrollment demand is heavy, and four-year programs are being added rapidly. The regional campuses can be expected to follow this same trend in the future, since this growth is favored by the universities and the state legislature. This, of course, will mean that the state will have a decreasing enrollment in "two-year institutions" unless new ones are formed. In fact, given adequate budget support, new institutions might be formed where sufficient enrollment demand is evident. This study will examine local enrollment demand and make some estimate of potential enrollment if such institutions are developed.

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[11] Higher Education in Kentucky, 1965-1975, the report of the Survey Team for the Long-Range Study of Higher Education in Kentucky to the Kentucky Commission on Higher Education (Lexington: January 31, 1966), pp. 256-57.

REGIONAL EDUCATION--THE LOCAL MARKET

The state universities draw their student bodies from throughout the state as well as from many other states. The residences of undergraduates are very diverse, with 16.4 percent of the total 1967-68 undergraduates in the four state universities coming from out of state and 62.2 percent coming from Indiana counties other than the county in which the university is located or adjacent counties. Nonetheless, a large portion of local youths choose a nearby public university, and almost 13 percent of the undergraduates of the state universities come from the same county.

Statistics on total enrollment blur the local impact of these universities. Table 26 shows the percentage of total undergraduates from a county who attend the public institution in their own county. About 80 percent of the undergraduates from the county who attend any institution in Indiana attend the state university in their own county. (The percentage is highest for Monroe County, with 89.6 percent of the undergraduates from Monroe County attending Indiana University.) In addition, an average of 44 percent of the students from counties adjacent to state universities attend the universities in the adjacent counties. This percentage is especially high for Indiana State University students; 71 percent of the Indiana undergraduates come from counties adjacent to Vigo County to attend Indiana State University.

TABLE 26

Percentage of College Students from County Attending Public Institutions in Same or Adjacent County, Undergraduates 1967-68

	Students from County in Which Institution Is Located	Students from Counties Adjacent to Institution Location
Regional campuses		
Fort Wayne, I.U. and Purdue	54.7%	22.1%
Southeast, I.U.	45.1*	16.7
Lake County, I.U. and Purdue	34.8	10.5
North Central, I.U.	34.8	6.4
South Bend, I.U.	34.3	7.8
Eastern Indiana Center, Earlham	26.3	7.0
Indianapolis, I.U. and Purdue+	22.5	15.4
Northwest, Purdue	17.3	1.5
Evansville, I.S.U.	14.9	8.3
Weighted average++	31.6%	10.6%
State universities		
Indiana University	89.6	30.7
Indiana State University	81.2	71.1
Ball State University	75.8	40.6
Purdue University	70.8	32.6
Weighted average++	79.4%	43.8%
Other		
Vincennes University	52.7%	12.6%

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*Includes Clark and Floyd counties.

+Indianapolis percentage does not include Professional Division of Indiana University; percentage of Marion County students attending public institutions in Marion County would increase to 26 percent if this division were included.

++Average of institutional averages.

A large percentage of Indiana youths who stay within the state for college attend the nearest public university. The regional campuses of the universities, however, show a different type of local market. As Table 20 indicates, 66 percent of the regional campus undergraduate enrollment comes from the same county. Almost 80 percent of the total undergraduate students come from the same or an adjacent county, and only 14 percent come from the rest of the state. Out-of-state enrollment is 6.5 percent of the total, primarily because most of the regional campuses are located in border counties.

The regional campuses, then, primarily serve a local market. However, as Table 26 also indicates, a smaller percentage of the total undergraduates from these counties attend the regional campus in their own county than do students in counties with a state university. For all regional campuses, an average of 31.6 percent undergraduates from a county with a regional campus attended that regional campus in the 1967-68 school year. Fort Wayne was especially high, with almost 55 percent of Allen County undergraduates attending either the Purdue University or the Indiana University regional campus in Fort Wayne. An average of only 10.6 percent of the undergraduates from adjacent counties attend the adjacent regional campus. Again, the Fort Wayne regional campus was high with 22 percent.

Vincennes University, the only two-year college in the state, has 52.7 percent of the undergraduates from Knox County and 12.6 percent of the undergraduates from adjacent counties. Unfortunately, Vincennes University cannot be considered typical and therefore be used for predicting the local impact of two-year institutions that might be located in the state in the future. It is the only such institution in Indiana and therefore attracts students from a larger area than might be projected for a statewide system of two-year institutions.

Instead, we will use the statistics in Tables 20 and 26 to estimate the possible composition of the student body in public institutions in the future. That is, we see that regional campuses attract a student body primarily from the same and adjacent counties. Therefore, as more public institutions are added, we would expect enrollment in these new institutions to come primarily from the local area. A large portion of county undergraduates will attend the nearest institution, with the highest percentage attending institutions with large program offerings. The percentage of youths who can fill their needs locally will be highest for the state universities, then for the regional campuses with four-year degrees, and then for the two-year institutions or institutions with limited offerings (such as vocational schools). Likewise, the percentage of Indiana undergraduates who will be attracted from counties other than the same or adjacent counties will be highest for the state universities and lowest for schools with limited offerings.

For example, we estimated the enrollments in the regional campuses under the present system (no additional public institutions except vocational) by dividing the regional campuses into two categories. Three regional campuses are expected to offer extensive programs and to begin to attract local youths as do the state universities. These three campuses, which will be located in the three largest counties in 1985 (Marion, Lake, and Allen), are assumed to enroll 70 percent of the county undergraduates, 25-40 percent of the undergraduates from adjacent counties, and 20 percent additional enrollment from outside the local area. The other regional campuses, which will all be offering a number of four-year degrees by 1985, will be composed of 50 percent of the county undergraduates, 15-25 percent of the undergraduates from adjacent counties, and an additional 20 percent enrollment from outside the local area.

On the other hand, one of our projections assumes that 20 two-year institutions might be located in specific counties throughout the state. Because of the extensive institutional alternatives, no enrollment is assumed to come from outside the county and adjacent counties. In counties without another public institution, however, enrollment in the two-year institutions is assumed to be 35 percent of the undergraduates who would have been enrolled somewhere in Indiana under the present system plus an increase of 20 percent in the undergraduates from the county because of the local presence of the institution and its lower admission standards.

The methodology of our projections will be discussed in a following section. Several different systems are assumed for speculative purposes, but all the projections are based on the size of the local market and the extent to which the program offerings of a particular type of institution will be sufficient to attract a large portion of this market. In order to develop projections, similar institutions must be considered comparable in their ability to serve local needs. Differences in local demand for education are taken into account by projecting the 1967 county portion of total state demand.

Because the regional campuses in their present form are a relatively new part of the public system of higher education and appear to be the target for extensive growth in the future, a projection of past enrollment trends would not offer as reasonable a prediction as would a look at the local market. However, Table 27 gives an indication of the growth in attendance at regional campuses from the counties with a regional campus.

These data are taken from the 1960 and 1968 student censuses and indicate the percentage of freshmen from each county attending a regional campus as opposed to attending a main campus or private institution within the state.

TABLE 27

Percentage Attendance at Regional Campus in Counties with Regional Campus

Area	% Freshmen Attending Regional Campus*		Freshman Participation Rate-Rank+	
	1960	1968	1960	1968
Total state	24.9%	33.4%		
Allen County	50.4	65.5	9	2
Howard County	43.3	58.7	3	4
Clark County	62.5	72.1	68	28
Floyd County	62.8	64.2	18	15
Vanderburgh County	1.1	30.9	19	21
Marion County	33.8	43.9	1	3
St. Joseph County	38.8	46.9	8	10
Lake County	56.4	52.7	5	18
La Porte County	29.8	46.3	26	29

*Percentage of county freshmen in Indiana attending regional campuses versus a private institution or state university in Indiana.

+The participation rate is the ratio of Indiana freshmen from one county in Indiana institutions to estimated high school graduates from that county. Rank indicates the rank among 92 counties of the state, and number one represents the highest participation.

SOURCE: Report of the 1968 Freshman Student Census, Table X (see Appendix A).

The percentage of county freshmen who attend a regional campus has increased in all counties with a regional campus except Lake County. The Evansville regional campus, started in 1967 by Indiana State University, had enrolled almost 31 percent of the county freshmen by 1968. Understandably, Vanderburgh County, with the Evansville campus in operation for only one year, had the lowest percentage of regional campus enrollment, and it was the only county of the nine counties that had a rate lower than the state average of 33.4 percent. Clark and Floyd counties, representing Indiana University Southeast, were especially high, with 72 percent and 64 percent of the county freshmen enrolled at a regional campus. Most of the counties have improved their ranksaccording to freshman to high school graduates since 1960.

POSSIBLE LOCATIONS FOR ADDITIONAL PUBLIC INSTITUTIONS

In order to forecast the impact of regional demand on undergraduate enrollment, some assumptions must be made about the future system of higher educational institutions in Indiana. We have seen the pattern of enrollment by local students in local campuses. However, local enrollment depends on the type of local institution, tuition, costs, admission standards, and many other factors. Although we will not vary all of these characteristics, we will attempt some estimates of the impact of additional public institutions on the present system.

In order to make such an estimate, however, we must also estimate the number and location of possible future institutions. New academic institutions presumably will be proposed as a means of serving the demand for local education because the quality, diversity, and quantity of institutions in the state are by any other standard quite ample. Therefore, since the institutions will be organized to serve local needs, the enrollment impact will depend on the specific locations, number, and offerings of the new public institutions.

Furthermore, in order for new institutions to offer even moderately extensive program options and maintain reasonable quality and cost standards, a certain minimum number of potential students must be achieved. Although we will not explicitly determine this minimum, we will examine only large population centers as potential locations because of this restriction. In fact, the enrollment projections might indicate that some of these locations lack sufficient potential for enrollment.

Private institutions are not included in this discussion because it is assumed that, although several of Indiana's private institutions of higher education serve a large local market, the institutions to be established in the future will undoubtedly be public. Private institutions are taken into consideration in estimating a community's potential to support an additional institution and in estimating the size of local enrollment, but no new private institutions are hypothesized.

It should be stressed that this discussion is presented for the purpose of estimating potential enrollment. Specific locations must be assumed; they will be determined on a logical basis in order to assure the most realistic forecasts possible. Nonetheless, the list of potential locations for public institutions should not be taken as recommended locations nor should any priorities be implied. In fact, additional institutions in any location should not be recommended without considering the alternative educational policies and their implications. For example, increases in the number of institutions necessarily affect the resources available for the expansion of the existing institutions.

Because the primary market for enrollment in institutions geared to the local market is the city, we began our search for potential locations by examining the 25 Indiana cities with over 20,000 population (see Table 15). As indicated previously, only one of these cities is over 30 miles commuting distance (but not more than 40 miles) from a public university or regional campus. However, since city residents do not constitute the entire market, we also examined all counties with over 40,000 population (see Figure 3). In addition, we checked the counties with 1,000 or more residents who were undergraduates in Indiana institutions in 1967-68. All counties with 1,000 undergraduates fulfill the other two population criteria. Further, the locations chosen include all counties with over 3,000 students in grades 9-12 in 1967-68 (Table 29), and these counties have the population base and the age group population necessary to provide a market for higher education.[12] (Table 29 lists the 20 indicated locations for additional public institutions of higher education and summarizes the criteria used to select these locations for purposes of estimating enrollment effects of alternate structures of higher education in Indiana.)

Lake and Marion counties included 25.7 percent of the 1967 total state population, and almost 31 percent of the state's population lived in Lake, Marion, or Allen counties.[13] All three counties are served by regional campuses of both Indiana University and Purdue University. The programs of these regional campuses are extensive and expanding, and we assume that the

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[12] Similar criteria are discussed by Glenn D. Williams, "Toward More Effective Junior College Districts," *Junior College Journal*, Vol. 31 (February, 1961), pp. 305-6.

[13] Estimated, July 1, 1967, by the Indiana State Board of Health.

TABLE 28

Indiana Counties with Over 2,000 High School Students in Grades 9-12 in 1967-68

County (Ranked by Enrollment)	High School Enrollment	County Population 1965
Marion	43,910	778,580
Lake	27,325	560,530
St. Joseph	15,810	252,875
Allen	14,457	257,382
Vanderburgh	10,008	175,236
Madison	8,970	136,815
Delaware	8,169	122,042
Elkhart	8,004	119,041
LaPorte	7,482	103,816
Vigo	6,400	109,648
Howard	5,509	78,069
Porter	5,474	76,611
Tippecanoe	5,236	99,686
Wayne	5,208	76,008
Grant	4,896	83,459
Clark	4,627	69,932
Johnson	3,852	57,254
Monroe	3,802	65,192
Bartholomew	3,796	55,218
Floyd	3,640	54,369
Hamilton	3,527	47,827
Hendricks	3,472	53,609
Kosciusko	3,464	44,716
Henry	3,421	49,902
Morgan	2,907	40,544
Marshall	2,891	33,463
Miami	2,866	41,102
Cass	2,673	41,489
Lawrence	2,630	36,947
Shelby	2,478	37,204
Knox	2,397	40,133
Wabash	2,365	34,540
Jackson	2,311	31,363
Montgomery	2,281	33,630
Clinton	2,236	30,729
Huntington	2,159	34,950
Hancock	2,147	30,354
De Kalb	2,145	29,172
Dubois	2,060	29,095
Gibson	2,032	29,081
Randolph	2,030	28,681
Noble	2,019	29,616
Adams	2,009	25,253

SOURCE: Report of Statistical Information for Indiana School Corporations School Year 1967-68 (Indianapolis: Divisions of School Finance, Educational Information and Research, State Superintendent of Public Instruction).

TABLE 29

Possible Locations for Two-Year Institutions of Higher Education in Indiana and Criteria Used to Establish List

A. Cities with a Public Institution in 1969 (Main or Regional Campus)

Criteria: city with population of 40,000 or over; over 600 undergraduates from county attended out of county in 1967-68; present public institution in county

(1) Cities (and their counties) with IVTC school (or DGTS) in 1968

Indianapolis (Marion) -- IVTC
South Bend-Mishawaka (St. Joseph) -- IVTC
Evansville (Vanderburgh) -- IVTC
Michigan City (LaPorte) -- IVTC
Kokomo (Howard) -- IVTC
Richmond (Wayne) -- IVTC
Lafayette (Tippecanoe) -- IVTC
Fort Wayne (Allen) -- DGTS, Indiana University

(2) Cities (and their county) with no IVTC school in 1968

Gary-Hammond-East Chicago (Lake)

B. Cities with No Public Institution in 1969

Criteria: city with population 20,000 or over; or county with over 1,000 undergraduates in 1967-68; or county with population 40,000 or over; all with over 3,000 1967-68 high school students; at least 600 undergraduates not attending local private institutions; no present public institution

(1) Cities (and their counties) with IVTC school in 1968

Columbus (Bartholomew) -- IVTC

(2) Cities (and their counties) with no IVTC school in 1968

Anderson (Madison)
Elkhart (Elkhart)
Marion (Grant)
Logansport (Cass)
New Castle (Henry)
Valparaiso (Porter)
Warsaw (Kosciusko)
Noblesville (Hamilton)
Plainfield (Hendricks)
Franklin (Johnson)

institutions' combined sizes and offerings in each county will have expanded significantly by 1985. It may be that by 1985 each county will have developed an independent public university out of the various regional campuses. Despite the existence of such institutions, however, we assume that the counties and the surrounding metropolitan areas could also support a two-year institution of higher education and vocational studies, which would be combined partly or entirely with the two-year institution.

Other cities with a population of over 40,000 are also assumed to have the necessary student potential to support a two-year institution, even if a different type of public institution of higher education is located in the city. One restriction to this assumption, however, is that at least 600 of the college undergraduates from a county in 1967-68 must have attended college in Indiana outside that county. This criterion excludes, for example, the counties containing Bloomington, Muncie, and Terre Haute, and is a measure of the potential student body not already attending either public or private institutions within the county.

There are nine counties that meet the necessary size criteria and that had public institutions of higher education in 1969. Seven of these counties had an operating IVTC school as well as a public campus. Allen County was served by the Indiana University Division of General and Technical Studies, which also offers vocational training. In addition, IVTC courses were offered in Lake County, and plans were made for expansion. These counties, then, might support a two-year college that provided programs and offerings different from those found at the already existing academic institutions. New public institutions would possibly result from expanding or combining present vocational offerings. However, the large counties probably could provide adequate student support for a four-year regional campus, a two-year college including some vocational and technical training, and specialized vocational schools as well.

A final comment should be made about the cities in this group of nine counties. South Bend-Mishawaka in St. Joseph County and Gary-Hammond-East Chicago in Lake County are counted only once as a potential location although each of the cities mentioned is large (only Mishawaka, with a 1967 population of 35,600, has less than 40,000 residents). In both counties, the cities mentioned are located very close to each other and form a common market. Lake County encloses an urban band that includes not only Gary-Hammond-East Chicago but several other corporate boundaries. As our projections are necessarily based on county statistics, we assume that only one institution of any one type would be located within a county. As we will see in System 5 (which assumes the addition of 20 two-year public institutions in the state) Lake County has a much higher projected enrollment than any county except Marion. No doubt, if the smaller campuses are feasible from a cost standpoint, Lake and Marion counties could each support more than one two-year institution; such institutions could be geographically separated for maximum student support. Presumably, institutions of different types (for example, a regional campus and a two-year institution) would also be geographically separated within the urban bands in order to expand student opportunity as much as possible.

Table 29 also lists 11 cities in counties that might support a two-year institution. Since this second group of counties now has no public institution, either a regional campus or a separate institution could be added. In developing the list of 11 counties, we again considered only counties with at least 600 undergraduates in 1967-68 enrolled outside the county; that is, not enrolled in private institutions in the county. These locations were chosen either because the county population was over 40,000 or included a city over 20,000. Of this group, only Columbus in Bartholomew County had an IVTC facility in 1968. All 11 counties had over 3,000 high school students (grades 9-12) in 1967.

The counties with populations over 40,000 but with no city over 20,000 present a special situation. For example, in 1967 Porter County had two cities near 20,000 (Portage with 19,300 and Valparaiso with 17,500). The county, with 1,498 undergraduates in 1967-68, is a potential market; in addition, the county demonstrated a high rate of college participation among the 18-21-year-old group. Kosciusko County had 877 undergraduates in 1967-68, with more than 600 attending schools out of the county; however, its largest city (Warsaw) had a 1967 population of only 8,400. Hamilton, Hendricks, and Johnson counties all had nearly 1,000 undergraduates in 1967-68. Their major cities, Noblesville (8,500), Plainfield (6,500), and Franklin (11,800), respectively, are all located a short distance from Indianapolis on major highways, and all of these counties are part of the Indianapolis SMSA. This lack of major population center, along with proximity and dependence upon the Indianapolis economy, presents a problem even for a hypothetical educational system. However, a major metropolitan area such as the Indianapolis SMSA can probably support several geographically dispersed two-year colleges, and we will assume that these three counties (in addition to Indianapolis) will be appropriate locations for schools in the SMSA.[14]

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[14] The importance of the multicampus junior college in a metropolitan area is apparent in Chicago. With eight campuses of the junior college system in operation in 1964, it was reported that "recent enrollment studies . . . show clearly that even with present pressures on city residents for more education, *effective* accessibility of the Chicago City Junior College to city residents depends heavily upon physical proximity of the campuses." "Multi-Campus, Chicago," *Junior College Journal*, Vol. 35 (October, 1964).

FIGURE 3

1967 Population of Indiana Counties

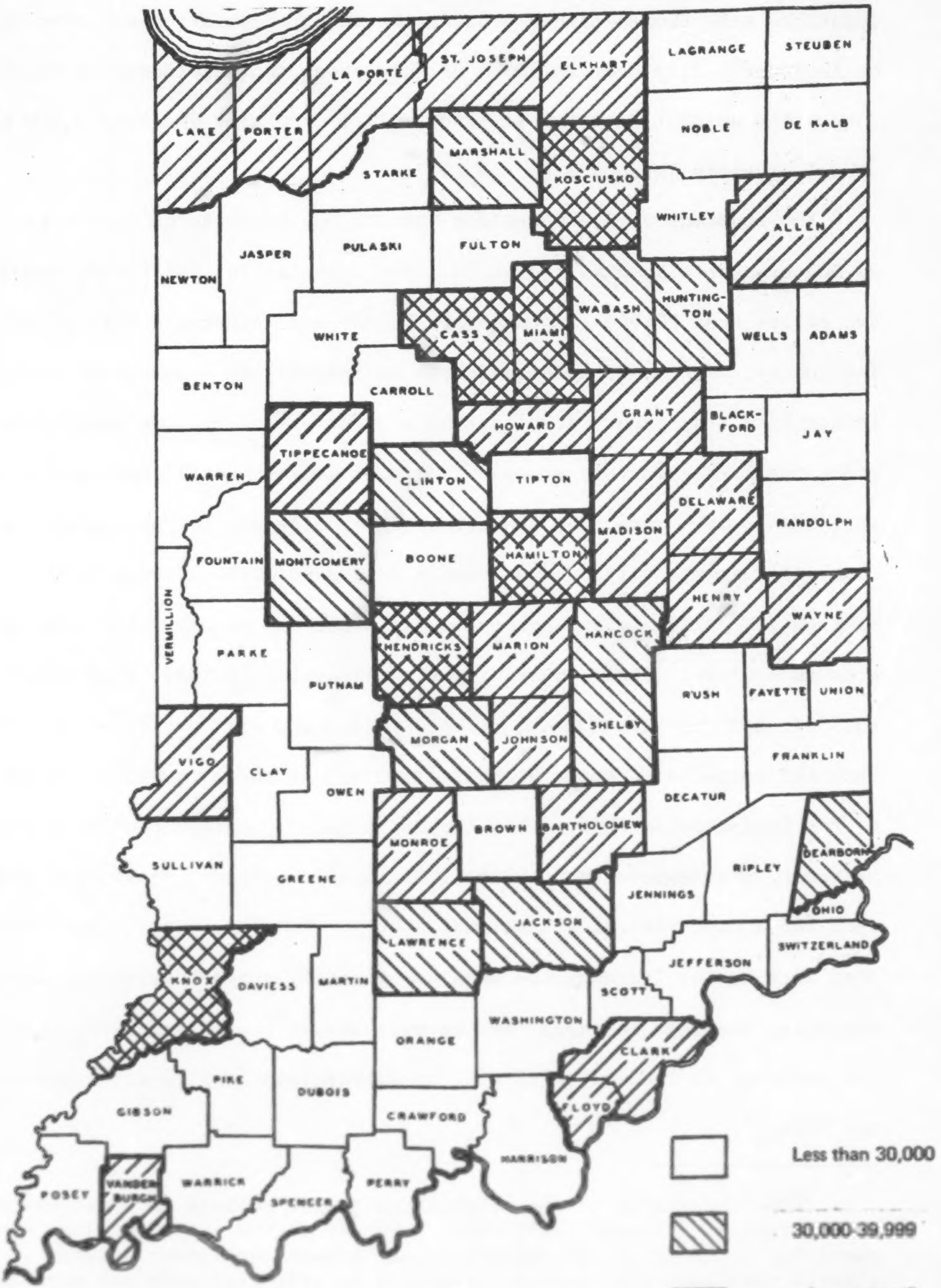
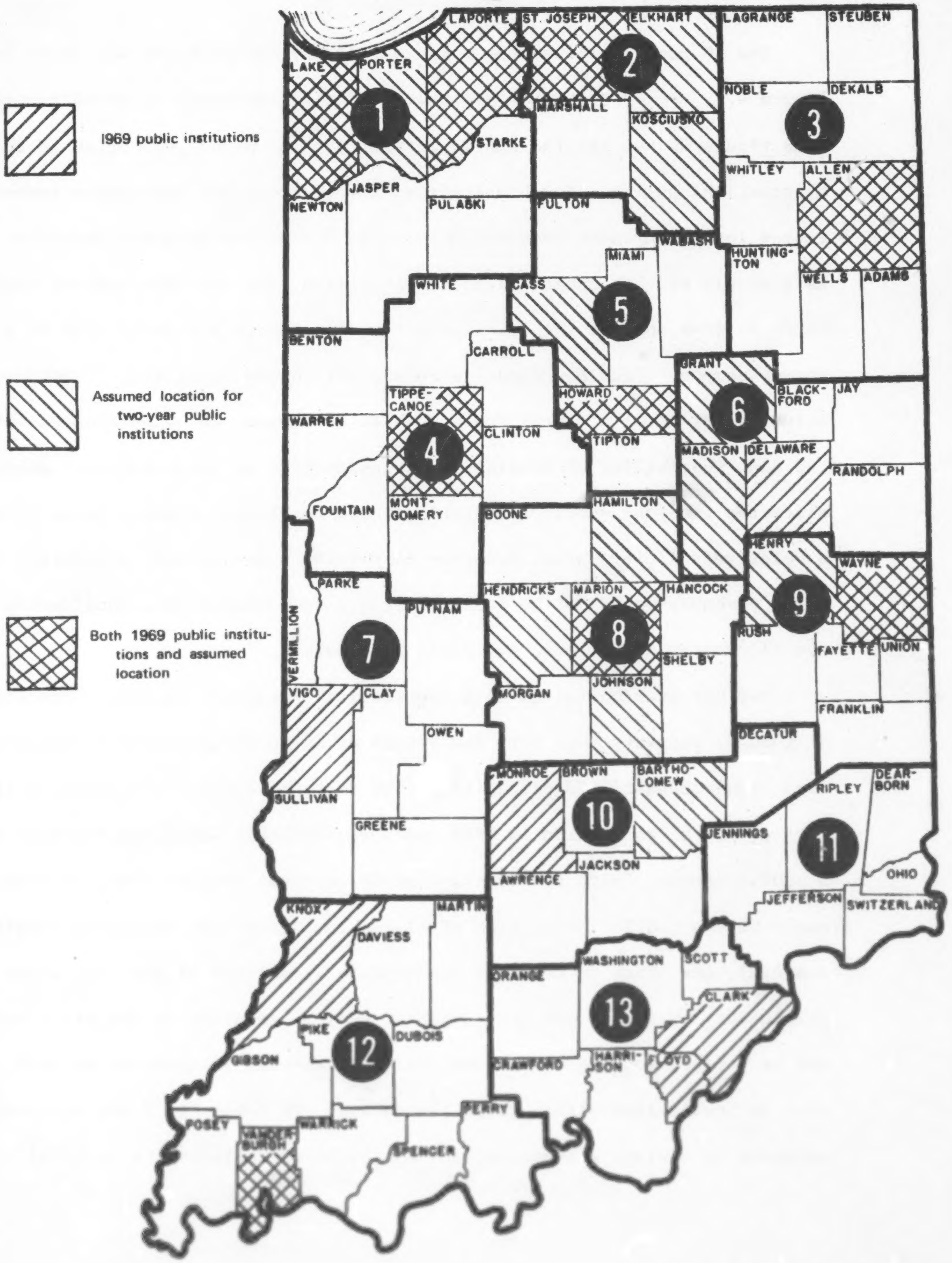

LAKE
PORTER
LA PORTE
ST. JOSEPH
ELKHART
LAGRANGE
STEUBEN
STARKE
MARSHALL
KOSCIUSKO
NOBLE
DE KALB
NEWTON
JASPER
PULASKI
FULTON
WHITLEY
ALLEN
WHITE
CASS
MIAMI
WABASH
HUNTINGTON
WELLS
ADAMS
BENTON
CARROLL
HOWARD
GRANT
BLACKFORD
JAY
WARREN
TIPPECANOE
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
VERMILLION
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
RUSH
FAYETTE
UNION
VIGO
CLAY
MORGAN
JOHNSON
SHELBY
FRANKLIN
OWEN
DECATUR
MONROE
BROWN
BARTHOLOMEW
SULLIVAN
GREENE
JENNINGS
RIPLEY
DEARBORN
OHIO
LAWRENCE
JACKSON
JEFFERSON
SWITZERLAND
KNOX
DAVIESS
MARTIN
SCOTT
WASHINGTON
ORANGE
CLARK
PIKE
DUBOIS
FLOYD
GIBSON
CRAWFORD
HARRISON
POSEY
VANDERBURGH
WARRICK
SPENCER
PERRY
Less than 30,000
30,000-39,999
40,000-49,999
Over 50,000

FIGURE 4

County Location of Public Institutions of Higher Education and Hypothetical Locations for Additional Institutions



▨ 1969 public institutions
▧ Assumed location for two-year public institutions
▩ Both 1969 public institutions and assumed location
LAKE
PORTER
LAPORTE
ST. JOSEPH
ELKHART
LAGRANGE
STEUBEN
1
2
3
MARSHALL
KOSCIUSKO
NOBLE
DEKALB
STARKE
NEWTON
JASPER
PULASKI
FULTON
WHITLEY
ALLEN
WABASH
MIAMI
HUNTINGTON
WELLS
ADAMS
WHITE
CASS
5
BENTON
CARROLL
GRANT
BLACKFORD
JAY
TIPPECANOE
HOWARD
6
WARREN
4
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
PARKE
HENDRICKS
MARION
HANCOCK
9
VERMILLION
PUTNAM
7
8
RUSH
FAYETTE
UNION
SHELBY
VIGO
CLAY
MORGAN
JOHNSON
FRANKLIN
OWEN
DECATUR
MONROE
BROWN
BARTHOLOMEW
RIPLEY
DEARBORN
SULLIVAN
10
GREENE
JENNINGS
11
JACKSON
OHIO
LAWRENCE
JEFFERSON
SWITZERLAND
KNOX
MARTIN
DAVIESS
WASHINGTON
SCOTT
ORANGE
13
CLARK
PIKE
DUBOIS
12
GIBSON
CRAWFORD
HARRISON
FLOYD
POSEY
VANDERBURGH
WARRICK
PERRY
SPENCER

The 20 possible locations for new two-year institutions are shown in Figure 4. Just as the state's population is concentrated in certain areas (see Figure 3), so are the public institutions of higher education in this hypothetical system. New hypothetical institutions are especially concentrated in the northern counties and around Marion and Delaware counties. As a result of this geographical concentration, the new institutions might begin to draw some of the enrollment that would have otherwise gone to a nearby campus. Each new campus also has its unique local market, and actual location of a campus would have to be determined by an analysis of the cost feasibility of serving a particular size of local market. However, since the two-year public institutions have enrollment drawing power from a relatively limited area, two-year institutions in sparsely populated areas probably would not be feasible from a cost standpoint, considering the alternatives presently available to students.

Further examination of this hypothetical structure of higher education (Figure 4) suggests that very few youths would be geographically isolated from higher education opportunities. In fact, as already discussed, a large portion of the population in 1969 was located within commuting distance of a public campus. With the addition of 20 two-year institutions, 26 counties would have a public institution of higher education (not including vocational schools), and these 26 counties incorporate 71 percent of the 1967 state population. With the new institutions, only 22 counties in the state would not be located adjacent to a county with a two-year institution or have such an institution within their boundaries. Of these 22, 7 are situated adjacent to a state university, and another 4 are adjacent to regional campuses. Of the remaining 11, Steuben County, in which Tri-State College is located, is by itself in the northeast corner of the state. The other remaining ten counties are bunched in two groups. Franklin, Dearborn, Ohio, Switzerland, and Ripley counties, located near Cincinnati, are not located adjacent to a public academic institution. Orange, Crawford, Perry, Spencer, and Dubois counties, located near the southern border, do not touch any county with a public institution of higher education. The 1967 population of 91,400 for the last five counties might suggest another area market for a public institution of higher education. (If enrollment in postsecondary vocational studies were 10 percent of the 18-21 age group, as estimated for the state by 1985, these counties would have 758 students for one or more vocational schools by 1985.) However, there were only a total of 1,517 undergraduates from these five counties in the 1967-68 school year.

It is obvious that 1985 county populations may vary significantly from the present populations. The plans for future locations that are based on population density should recognize that some counties are gaining in population and some are losing. However, to some extent, this problem is minimized because of the large number of counties already containing public institutions. If population trends change significantly, the increased enrollment that may ensue will result in the expansion of nearby campuses, and additional campuses will not necessarily be required.

Tables 30 and 31 present some detailed estimates of the 1985 Indiana population, which are based on a comprehensive population forecast done by Indiana University's Bureau of Business Research in 1966. Table 30 shows 32 Indiana counties that are projected to have a population of over 40,000 by 1985.[15] The only county with a public institution of higher education that is not expected to have a population of over 40,000 by 1985 is Knox County, where Vincennes University is located (according to Series C projections, Knox County population in 1985 would be 32,965, declining from 40,133 in 1965).

On the other hand, seven of the counties with a population of over 40,000 are not assumed to have a public institution by 1985. Of these seven counties (Hancock, Huntington, Miami, Montgomery, Morgan, Shelby, and Wabash), only Miami and Morgan counties had a population greater than 40,000 in 1965, and all are among the lowest population group shown in Table 30. The only one of these seven counties estimated to have a population greater than 55,000 by 1985 is Morgan County, where a large portion of the students attend Indiana University in adjacent Monroe County. (Under the assumption of 20 new two-year colleges, in 1985 Morgan County will also be adjacent to the two-year colleges in Hendricks and Johnson counties and the regional university in Marion County.) All except Wabash were adjacent to a county with a state university or regional campus in 1969.

It would appear from Table 30 that no major change in order ranking of population is projected between 1965 and 1985. Those counties that gain in rank order by this projection method (for example, Porter, Vigo, Hendricks, and Johnson), however, are typically those in metropolitan areas. Table 31 gives more detail about these SMSA's.

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[15] The projections were developed in terms of three different sets of assumptions (Series A, B, and C). For each county, the researchers presented a judgment of the "most appropriate series" or a range between two. Since Table 29 lists the most appropriate series projection or the largest estimate of a range, no comparison with a single projection for state population is appropriate. See Bureau of Business Research, Graduate School of Business, Indiana University, Indiana Population Projections 1965-1985 (Research Report No. 3; Bloomington, Ind.: September, 1966). The series assumptions are as follows: Series A--slightly declining mortality to 1985, a substantial drop in fertility to 1985, no net migration. Series B--slightly declining mortality to 1985, a slight decline in fertility to 1985, 1950-60 net migration rates will continue to 1985. Series C--slightly declining mortality to 1985, a substantial drop in fertility to 1985, 1950-60 net migration rates will continue to 1985.

Table 31 presents the 11 SMSA's identified by the U.S. Bureau of the Budget in 1969 and the 5 additional counties that may qualify by 1985 if their central cities obtain a population of over 50,000. For example, Elkhart County, one of the potential SMSA's, may become the sixth largest in the state by 1985, with a rapid population growth of 65.6 percent during the 1965-85 period. The Indianapolis SMSA, which includes eight counties, is projected to show the highest rate of increase in population (almost 80 percent) during these years. If Elkhart (Elkhart County) and Michigan City (LaPorte County) become SMSA's, the six-county northern urban band that also includes the Gary-Hammond-East Chicago SMSA and the South Bend SMSA would have a 1985 population of 1,681,000, as compared to 1,922,000 for the Indianapolis SMSA. Total 1985 population in the state's SMSA's by 1985 could be as high as 5,486,000; total state population estimates range from 6,268,000 to 7,948,000.

The metropolitan areas, then, are projected to grow rapidly and to include a major portion of the state's population. Our projections of enrollment in regional institutions of higher education are based on an assumption that the same percentage of total undergraduates will come from each county in 1985 as did in 1967. This could lead to underestimating the enrollment impact in the rapidly growing metropolitan counties, but the fact that these counties also represented a major portion of the 1967 population means that the increase in percentage of total students from metropolitan areas should not be large. The three counties with the largest

TABLE 30

32 Indiana Counties over 40,000 Population in 1985 by Most Appropriate Projection Series*

Counties	1985		1975		1965	
	Pop.	Rank	Pop.	Rank	Pop.	Rank
Allen	402,337	3	317,742	3	257,382	3
Bartholomew	97,189	19	72,529	20	55,218	19
Cass	44,624	29	42,810	28	41,489	25
Clark	107,044	17	86,525	17	69,932	16
Delaware	174,273	10	146,226	8	122,042	7
Elkhart	197,160	7	151,451	7	119,041	8
Floyd	67,226	23	60,262	22	54,369	20
Grant	124,564	15	100,888	13	83,459	12
Hamilton	99,553	18	68,217	21	47,827	23
Hancock	53,383	28	39,736	29	30,354	32
Hendricks	170,099	11	93,964	16	53,609	21
Henry	54,523	26	52,125	25	49,902	22
Howard	124,667	14	97,866	15	78,069	13
Huntington	41,445	32	37,734	31	34,950	29
Johnson	180,718	9	99,763	14	57,254	18
Kosciusko	66,685	24	54,523	24	44,716	24
Lake	753,742	2	648,243	2	560,530	2
LaPorte	147,891	13	123,116	11	103,816	10
Madison	189,661	8	161,286	6	136,815	6
Marion	1,244,041	1	973,424	1	778,580	1
Miami	55,005	25	47,319	26	41,102	26
Monroe	93,022	20	78,963	19	65,192	17
Montgomery	42,460	30	37,410	32	33,630	31
Morgan	84,744	22	58,021	23	40,544	27
Porter	211,409	6	125,039	10	76,611	14
St. Joseph	331,604	4	287,393	4	252,875	4
Shelby	53,865	27	44,297	27	37,204	28
Tippecanoe	156,111	12	125,632	9	99,686	11
Vanderburgh	212,609	5	192,602	5	175,236	5
Vigo	112,860	16	111,122	12	109,648	9
Wabash	42,189	31	38,248	30	34,540	30
Wayne	86,772	21	80,914	18	76,008	15
Total	5,823,115		4,655,372		3,821,630	

*"Most appropriate series" is derived from a qualitative judgment of the researchers regarding the most reasonable of three quantitative projections for each county. Where a range was referred to as "most appropriate," this table lists the highest figure in the range. Comparison with state totals by each set of assumptions is not appropriate.

SOURCE: Bureau of Business Research, Graduate School of Business, Indiana University, Indiana Population Projections 1965-85 (Research Report No. 3; Bloomington, Ind.: September, 1966).

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TABLE 31

Standard Metropolitan Statistical Areas in Indiana, 1965 and 1985 Population

SMSA	Population* 1965	Population* 1985	1965-85 % Increase	% 1967 Indiana Undergraduates from County+
Indianapolis				
Boone	28.9	35.3	22.1%	.42%
Hamilton	47.8	99.6	108.2	.72
Hancock	30.4	53.4	75.9	.41
Hendricks	53.6	170.1	217.3	.73
Johnson	57.3	180.7	215.6	.68
Marion	778.6	1,244.0	59.8	12.41
Morgan	40.5	84.7	109.0	.41
Shelby	37.2	53.9	44.8	.41
Total	1,074.3	1,921.7	78.9	16.19
Gary-Hammond-East Chicago				
Lake	560.5	753.7	34.5	8.17
Porter	76.6	211.4	176.0	1.10
Total	637.1	965.2	51.5	9.27
Fort Wayne				
Allen	257.4	402.3	56.3	3.41
South Bend				
Marshall	33.5	39.2	17.2	.49
St. Joseph	252.9	331.6	31.1	3.79
Total	286.3	370.8	29.5	4.28
Evansville				
Vanderburgh	175.2	212.6	21.3	3.73
Warrick	24.3	28.1	15.6	.33
Total	199.5	240.7	20.6	4.06
Elkhart++				
Elkhart	119.0	197.2	65.6	1.40

(continued)

TABLE 31
(cont'd.)

SMSA	Population*		1965-85 % Increase	% 1967 Indiana Undergraduates from County[+]
	1965	1985		
Anderson				
Madison	136.8	190.0	38.6%	1.69%
Muncie				
Delaware	122.0	174.3	42.8	1.70
Terre Haute				
Clay	24.0	22.7	-5.4	.41
Sullivan	20.7	17.1	-17.0	.30
Vermillion	16.7	13.0	-21.8	.26
Vigo	109.4	112.9	2.9	2.09
Total	171.0	165.8	-3.1	3.06
Lafayette				
Tippecanoe	99.7	156.1	56.6	1.61
Michigan City ++				
LaPorte	103.8	147.9	42.5	1.59
Kokomo ++				
Howard	78.1	124.7	59.7	1.07
Marion ++				
Grant	83.5	124.6	49.3	.98
Richmond ++				
Union	6.4	6.3	-0.6	.07
Wayne	76.0	86.8	14.2	1.02
Total	82.4	93.1	13.0	1.09
Partial SMSA's (Indiana counties only)				
Louisville				
Clark	69.9	107.0	53.1	.84
Floyd	54.4	67.2	23.6	.60
Total	124.3	174.3	40.2	1.44
Cincinnati				
Dearborn	30.4	37.7	24.1	.24
Total SMSA's	3,605.7	5,485.9	52.1	53.08

(continued)

TABLE 31
(cont'd.)

*Population is projected by the Bureau of Business Research, Indiana University. "Most appropriate series" or highest estimate in an appropriate range is reported here for each county and cannot be compared with total state estimates.

+ Undergraduates from county as a percent of total undergraduates in Indiana institutions of higher education, 1967-68. See Appendix G. A total of 72 percent of the 1967-68 undergraduates were from Indiana counties.

++ Potential SMSA areas, as estimated by "Survey of Current Buying Power," Sales Management (June 10, 1967). Areas are assumed to have a potential because the central city will attain a population of more than 50,000.

percentage increases (Porter, Hendricks, and Johnson) are all assumed to be potential locations of a two-year institution, and the presence of a new institution is assumed to increase percentage participation in college.

FUTURE SYSTEM OF HIGHER EDUCATION IN INDIANA

The easiest prediction about the future is that it will be something like the past. As for the structure of Indiana's system of higher education, we can predict that it is "most likely" that the present structure will be maintained, with growth and shifts occurring within the present framework. This prediction is not unreasonable, for Indiana has a large and diverse group of public and private institutions of higher education, as well as the embryo of a postsecondary vocational training system.

Within this present system, however, two sectors, the Indiana Vocational Technical College and the regional campuses, are relatively new; their growth and changes are difficult to predict on the basis of past trends. Much of the future of the Indiana Vocational Technical College, begun in 1963, has yet to be determined by policy and budget decisions. In addition, the regional campuses of the state universities are in the process of developing into 4-year degree granting institutions; previously they offered only 2-year transfer courses and a limited number of degrees on some campuses. Through its allocation of funds the 1969 General Assembly also indicated an interest in the development of the regional campuses.

If the present system continues, then, there will nevertheless be significant shifts in the portion of the total system devoted to 4-year regional campuses and vocational training. Furthermore, these are the institutions that a study of "regional demand for higher education" must be most concerned with. For this reason, we will make projections for the regional institutions developed to serve the regional demands. This means that the projections do not concentrate on enrollments in state universities, but rather that they assume that the state universities enroll those public undergraduates not enrolled in regional institutions.

In the projections, we consider six different types of public institutions. The specific characteristics of each are presented below.

1. State universities (U)--multiprogram universities offering degrees through the Ph.D.; includes Indiana University, Purdue University, Ball State University, and Indiana State University.
2. Regional universities (R_u)--multiprogram, four-year campuses that resemble state universities in their ability to attract youths from surrounding areas; includes regional centers in Indianapolis, Fort Wayne, and Lake counties.
3. Four-year regional campuses (R_f)--campuses with academic offerings less extensive than those of the universities, but with a diversity of degrees including the master's; may or may not be connected to state universities, but have similar admission standards; includes all present regional campuses of the state universities.
4. Two-year regional campuses (R_t)--academic institutions offering transfer and terminal studies, sponsored by state universities, with same admission standards; in locations not served by any of the above.
5. Two-year institutions (T)--institutions offering vocational training in addition to transfer and terminal two-year academic programs, with lower admission standards than the universities; an alternate to two-year regional campuses; may be located in same city as other public academic institutions.
6. Vocational and technical schools (V)--postsecondary vocational training, including Indiana Vocational Technical College; may be a supplement to two-year institutions with vocational training.

These types of institutions vary primarily in the size of their undertakings; they also serve different size markets. The definitions are not exhaustive, and no inherent advantages other than specified should be implied. For example, "community service" offerings--often claimed as the advantage of a special type of institution--might, in fact, be undertaken successfully by any of the institutional types described. Likewise, evening and part-time programs could be undertaken by all.

Jurisdiction over the various campuses would seem to have little effect on the size of the student body attracted, and we have attempted to define the institutional types in such a way that jurisdictional changes would have little effect on the projections. The development of the regional universities in Indianapolis, Fort Wayne, and Lake County is assumed to be the result of a significant increase in program offerings in these locations. Such expansion could represent either the combined efforts of the Purdue University and Indiana University campuses in these locations or those of a single institution. (In fact, plans to unify the campuses of Indiana University and Purdue University in Indianapolis are already well under way.)

The four-year regional campuses, representing all present regional campuses except the three just mentioned, are also assumed to expand significantly. Whether or not they are under the jurisdiction of the state universities would seem to make little difference in total student demand unless significant changes were made in tuition or admission standards. In order to make meaningful projections, it must also be assumed that admission standards would be similar, regardless of jurisdiction. Similarly, the two-year regional campuses in new locations might also be independent, but constant admission standards must be assumed in order to make consistent projections. If these assumptions prove to be unrealistic, the enrollment projections will have to be modified.

It should be noted that the difference between the two-year regional campuses and the two-year institutions is attributed to the inclusion of a portion of vocational studies in the curriculum and the lower admission standards found in the two-year institutions. The two-year institutions are similar to junior colleges or community colleges, but they are called two-year institutions in this report so that the content and not the label may be examined. In fact, these institutions might be administered by the state universities, such as Indiana University's Division of General and Technical Studies.

In addition, vocational and technical postsecondary schools differ from the two-year institutions in that they offer no (or limited) academic courses. However, although the two types of two-year institutions appear to be mutually exclusive alternatives, given the limited number of potential locations, it is assumed that vocational schools may coexist with two-year campuses or may satisfy smaller geographic markets that could not support two-year academic institutions.

Obviously, there are some differences in community and student preferences for an additional public institution. The various types of institutions also vary in program emphasis and in cost of administration. However, we have attempted to define some general types, and we argue that the major differences in enrollment are the result of different policies regarding admission standards, student costs, and size of offerings.[16] Our hypothetical systems include only variations in size of institution and admission policies. (The effect of variations in tuition costs are discussed elsewhere in the comprehensive study, although variations in number of institutions in the state relate to nontuition costs of students.) If the admission standards of future institutions vary greatly from those assumed in our projections, major enrollment changes might result.[17] This factor should be kept in mind in analyzing our projections.

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[16] No doubt some differences in enrollment would result from various alterante systems. For example, connection with a major university gives regional campus students the advantage of that university's prestige and helps to ease the transfer of credits. On the other hand, one study by Leland L. Medsker showed larger percentages of local students attending junior colleges than "extension centers," presumably because of closer community ties and less tendency to be awed by the stature and detachment of the institution. The sample used in that study, however, was quite small and, as we have seen, it is difficult to generalize from one educational system to another. Leland L. Medsker and James W. Trent, "The Influence of Different Types of Public Higher Institutions on College Attendance from Varying Socioeconomic and Ability Levels" (Berkeley: Center for the Study of Higher Education, University of California, 1965).

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[17] For example, if the four-year regional campuses had lower standards than the universities, they might attract many of the students whom we assumed would attend the two-year institutions because of their lower standards.

V. UNDERGRADUATE ENROLLMENT PROJECTIONS FOR 1985

Having established potential locations for additional public institutions and defined some general types of institutions that could be added to the public system of higher education, we can now present some projections for undergraduate enrollment in 1985. Five alternate systems are presented for purposes of comparison. The systems are summarized in Table 32 and are presented in more detail in Tables 33-38, which appear at the end of this chapter.

As discussed previously, our estimate of the most likely system by 1985 is System 1. System 1, which provides for an extension of the present system, anticipates the expansion of postsecondary vocational education and continued development of the existing regional campuses. This system also projects that regional universities will develop in Indianapolis, Lake County, and Fort Wayne and that the other regional campuses will offer more complete programs and four-year degrees by 1985. The other systems are presented for comparison purposes and can be used in a variety of ways. They indicate how undergraduate enrollments in present institutions will be affected by the addition of new public institutions to the system. They also indicate the potential market for two-year institutions of higher education, as have been suggested frequently to the voters and legislative decision makers of Indiana. In addition, these systems estimate the number of additional students that might be served by additional institutions (although our knowledge on this point is limited). And, finally, they present a base for evaluating policies (such as determining budget requirements) that would be created if the system of higher education in Indiana were expanded into new geographical areas. No estimate of the feasibility of the various systems is attempted here, although the information is presented in such a way that it should aid in an evaluation of feasibility.

PRELIMINARY ASSUMPTIONS

All projections are based upon the assumption that the total undergraduate enrollment in public and private institutions of higher education in Indiana will be 225,000 by 1985. This figure is higher than the highest total of 217,243 projected by Parkhurst and Suddarth, but it has been coordinated with later enrollment estimates in the "program demand" portion of this comprehensive study.[1] This total enrollment does not include post-secondary vocational education, but it does include both in-state and out-of-state students in Indiana colleges. It is an estimate of the number of students in 1985, not the full-time equivalents.[2]

Total enrollment is projected for each of the counties in Appendix G, and it is based on the assumption that the same percentage of total undergraduates will come from each county in 1985 as in 1967. Since the multiple influences on county college participation rates are difficult to quantify, this assumption allows for a projection of similar influences into 1985 without quantifying them. Only if a new institution is located in the county or the admission standards are significantly lowered is the basic enrollment expected to change (as will be shown in later projections). The basic enrollment figure for each county is used in all the projections and should be adjusted if total undergraduate enrollment projections are significantly different from 225,000.

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[1] See Parkhurst and Suddarth, "Enrollment Projections," p. 31.

[2] This is also consistent with other parts of the total study. Although it would be valuable to estimate an increase in the portion of full-time students on regional campuses, this report does not make such an explicit estimate. For an estimate of Indiana University regional campus full-time students, see Appendix F.

Projecting enrollment from county percentages of the total also assumes that enrollment by out-of-state students in Indiana colleges will be constant. This means that 162,096 (72 percent of the 1985 total of 225,000 undergraduate enrollment) are Indiana residents from the 92 counties.

Several other assumptions are made for the total system. Enrollment in the state universities (main campuses) and Vincennes University is defined as the public enrollment that remains after the enrollment in the regional institutions is subtracted from total public enrollment.[3] For this purpose, total public enrollment is estimated at 153,000, or 68 percent of the total--only slightly higher than the relationship that existed in 1967. Finally, vocational postsecondary students are defined as 10 percent of the 18-21 age group, or about 37,000 by 1985.

SYSTEM 1

System 1 is a projection of the present system, with all regional campuses of the state universities expanding into multiprogram, four-year degree granting institutions. Lake County, Indianapolis, and Fort Wayne regional campuses are assumed to become regional universities that will resemble the state universities in their ability to attract a large portion of the youths from the surrounding area. The system is summarized in Table 33.

Under System 1, the regional campuses absorb almost 50 percent of the total public enrollment by 1985 (or 40 percent if vocational enrollment is included in the total for public enrollment). The regional universities (R_u)

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[3] Vincennes University is included in the public sector remaining after regional campuses are subtracted and is therefore implicitly defined as a state university in the following discussion.

alone represent 27 percent of the total public enrollment (R+U), and the state universities represent 40.7 percent. These new proportions are the result of a 27 percent growth in the state universities and a vastly larger 228 percent growth in the regional campuses (the highest growth occurred in the four-year regional [R_f] campuses). The total public system (U + R) will increase 82 percent, and private institutions will grow 74 percent from 1967 to 1985.

With the fast growth in the public regional campuses, it is quite possible that the public sector of higher education will involve an even higher portion of the total state enrollment by 1985 than projected. If so, the result would be an increase in the enrollment projections for the state universities and therefore a greater growth in undergraduate enrollment than the 27 percent shown in System 1. For example, if the public portion of undergraduate enrollments reached 70 percent by 1985, the growth in the public sector from 1967 to 1985 would be 87 percent, as compared to the 63 percent increase in the private sector. This would mean a 34 percent growth for the state universities instead of the 27 percent indicated in System 1. On the other hand, for the public sector to reach an increase of 100 percent (52 percent for the state universities), it would have to include 75 percent of the 225,000 undergraduates projected for 1985.

Projections for R_u and R_f result from the use of basic undergraduate enrollment projections in Appendix G. Since the regional universities will begin to resemble the state universities in their ability to attract local youths, they are projected to enroll 70 percent of the basic county enrollees (B) in their counties. It should be remembered that, as we noted in Table 26, in 1967 the state universities enrolled an average of 80 percent local youths (ranging from 70 percent to 90 percent). Likewise, Table 26 showed that the state universities attracted an average of 44 percent of the enrollees from adjacent counties. For 1985 the regional universities are projected to have a basic county enrollment of 25 percent from adjacent counties (A) for Lake County and Indianapolis and 40 percent for Fort Wayne. The higher figure for Fort Wayne acknowledges that the Fort Wayne campus had a higher share of adjacent county students in 1967 (see Table 26) and that this area is relatively more isolated from alternate public institutions than are the other two areas. The regional universities will also enroll an additional 20 percent of the county and adjacent-county students from a population outside this area. This figure is comparable to the 20 percent enrolled in regional campuses in 1967-68 from outside the county and the adjacent-county area. Although expansion of the R_u might mean that a larger portion of students would be attracted from outside the area, this conservative 20 percent estimate recognizes the fact that when students must travel a considerable distance, they have a large number of alternatives, including four state universities.

The four-year regional campuses are projected to enroll 50 percent of the basic county enrollees in the county in which they are located. This compares to an average of 31.6 percent for 1967. Because the Indiana University Southeast campus had already reached 45 percent home county enrollees by 1967 and because this area is relatively isolated from alternate educational choices, 60 percent of the county enrollees are projected for this campus. Adjacent county enrollment for the R_f varies in recognition of 1967 trends and alternatives available. Again, enrollment in the Southeast campus is high, with 25 percent of the adjacent county undergraduates attending that campus.

Adjacent-county enrollment at the Kokomo campus, the North Central campus at Westville, and the Eastern Indiana Center at Earlham is projected at 15 percent, and the remaining campuses at 20 percent. The four-year regional campuses, like the regional universities, will receive an additional 20 percent enrollment from the population at large.[4]

This system shows no increase in enrollment projections. That is, the projection of 225,000 students by 1985 is in itself a high enrollment, representing a 65 percent growth over the 1967-68 enrollment. It might be argued that this rapid growth in enrollment would not, in fact, be possible without the expansion of the regional campuses. Our projections will show enrollments greater than this 225,000 only if entirely new institutions are located in the state.

Projections in System 1 represent 162,000 Indiana residents who are undergraduates in the state plus 37,000 enrolled in public vocational training schools. This total of 199,000 Indiana students will represent 54 percent of the 18-21 age group in 1985. This percentage might be raised to 62 percent if it is assumed that 20 percent of the number of resident undergraduates are enrolled as undergraduates out of state (a figure similar to that developed in the 1958 and 1963 national migration studies).

By way of comparison, 1967 Indiana undergraduates in Indiana institutions of higher education represented 28 percent of the 18-21 age group. If the undergraduate figure is raised by 20 percent (based on an estimate of Indiana students attending college out of state) and 2,216 public vocational students are added at the same time, it can be said that in 1967 about 34 percent of the age group was enrolled. The 62 percent projected for 1985, then, is a significant increase.

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[4] Vincennes University is the only public two-year campus in the state, and its enrollment is included in the total for U, the state universities. Although enrollment is not specifically projected, estimates based on a method similar to System 3 for two-year institutions suggest a 1985 enrollment of 1,321. (This is 55 percent B, 10 percent A, and 5 percent county age group 18-21). This is a decline from the 1967 enrollment, and it is probable that no such decline will occur if Vincennes remains the only two-year public institution in the state. In fact, even with new institutions, Vincennes University could be expected to continue attracting students from throughout the state.

SYSTEM 2

System 2 considers the addition of 11 two-year regional campuses (or independent two-year campuses with similar admission standards) in major population areas without a public institution of higher education. Projected undergraduate enrollment is quite conservative in that all enrollment is expected to come from the county in which the institution is located. The counties adjacent to the new locations in many cases are also adjacent to another public institution with more extensive offerings. It is assumed that the R_t will attract undergraduates from a limited area, although experience might modify this assumption.

Total enrollment for R_t by 1985 is projected at a little over 10,000; 2,227 of this total is an increase in basic enrollment that results from the presence of public institutions in areas where previously there were no such institutions. That is, R_t enrollment is projected for each location to equal 35 percent of the basic county undergraduate enrollment (B) shown in Appendix G, plus 10 percent of this figure (because of an increase in county participation). The total is thus 45 percent B from the county in which the R_t is located.

System 2 also projects reductions in other public institutions as the result of new two-year campuses. According to System 2, if the R_t is adjacent to a county with a four-year regional campus (R_f), then three-fourths of the enrollment from the R_t county assumed to be attending the R_f in System 1 is assumed to attend an R_t instead. Reductions from the state universities are set at one-half of the enrollment in U from that county, and it is assumed that the adjacent county enrollment in U will be approximately the same in 1985 as in 1967. For example, the figures for Ball State University in 1967 were 76 percent from the same county and 41 percent from adjacent counties. If an R_t were established in a county adjacent to the one in which Ball State is located, then one-half of those who might have attended Ball State University from R_t county (or 20 percent of B) would go to the R_t instead. The percentage reduction from adjacent counties is less for state universities than for regional campuses because of the more extensive offerings found at the University.

After R_f and U have been reduced by the above amounts, the remainder of the enrollment in R_t (not including the basic increase) is assumed to come from the state universities at large. The result of these calculations is shown in Table 34. Because three R_t's are located in counties adjacent to Ball State University, the greatest reduction is noted in that university (1,469 fewer undergraduates than there would have been without the R_t's). The regional university at Indianapolis is also surrounded by three adjacent R_t's and it loses 956 undergraduates.

Total reductions show that the state universities will lose 5,133 undergraduates and the regional campuses (R_u and R_f) will lose 2,658.

Total undergraduate enrollment in the regional campuses (R_u, R_f, and R_t) is 82,900, or 43 percent of the total public enrollment. This compares with the total figure of 40 percent found in System 1.

SYSTEM 3

System 3 involves the same locations for 11 new two-year institutions (T), as does System 2. The difference between an R_t and a T is that the T has lower admission standards and offers vocational studies.

The undergraduate enrollment in T is 35 percent of the basic 1985 undergraduate enrollment from the county (B) plus an increase of 20 percent B. The large increase results from the lower admission standards and the effect of the presence of a campus in the county. In this sytem adjacent counties are also affected because lower admission standards in T present alternatives not otherwise available. Therefore, a 10 percent increase in basic undergraduate enrollment from the adjacent counties (A) is projected for T.[5] In addition, one-half of the vocational enrollment from the county, or 5 percent of the 18-21 age group, is assumed to attend T.

The total enrollment in 11 T's in System 3 (summarized in Table 35) is 23,026, an average enrollment of almost 2,100. This total undergraduate enrollment includes an increase in basic enrollment of 12,212 and 3,023 enrolled in vocational studies. Reductions are the same as those in System 2.

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[5] No increase from an adjacent county is projected of that county also has a T; only 5 percent is projected if the county is adjacent to more than one T.

Vocational enrollment involves an average of 13 percent of the total enrollment for the 11 T's. However, the assumption that 5 percent of the county 18-21 age group will be enrolled in vocational education at two-year institutions may be too low. As we saw in Table 25, some of the IVTC schools operating in 1968 had an enrollment representing over 5 percent of the county age group. It is assumed in System 3 that a two-year institution (T) and a vocational school (V) might coexist in these 11 counties and split the potential enrollment. However, in 1968 Bartholomew County was the only county of these 11 potential locations with an IVTC facility.

If the assumptions of System 3 were modified to include 10 percent of the age group (6,046 total), then the vocational students would include 23.3 percent of the T enrollment. This seems a reasonable estimate since counties with a T might be expected to have a higher than average number of vocational students as a percentage of this age group. On the other hand, if the two-year institutions were expected to be equally divided between academic and vocational students, approximately 20,000 vocational students would be required for these 11 schools. This total would require an enrollment of the 6,000 students who represent 10 percent of the county 18-21 age groups and the 14,000 additional students from adjacent counties. Such a distribution seems unlikely in view of the local nature of demand for vocational studies. Therefore, the 11 new T's could be expected to be dominated by academic studies of a transfer or terminal nature. Potential vocational students outside the 11 T's (estimated between 31,000 and 34,000) would still need an extensive system of schools to serve their local needs.

SYSTEM 4

The new two-year institutions (T) in System 4 are located in three of the state's major cities that already have public regional campuses. Because of the population size of the counties involved, these 3 T's have a higher projected enrollment than the 11 T's in counties without public institutions (32,100 versus 23,000). The three cities chosen for illustrative purposes are Indianapolis, Gary, and South Bend. Table 36 summarizes System 4 under this assumption and details the enrollment characteristics in the three cities under the projected system.

In System 4 the T's are located in counties that already have public institutions. However, the T admission standards are low; and, as in System 3, the enrollment includes vocational students. The T enrollment is assumed to consist of 30 percent B (which includes a 10 percent increase in B), 20 percent A (which includes a 10 percent increase in A), and 5 percent of the county age group in vocational studies. This system results in a total enrollment of 32,100, with 7,500 representing a basic increase in enrollment and 6,300 (or 20 percent) representing vocational students. If vocational enrollment were increased to 10 percent of the county 18-21 age group, 12,600 students would be enrolled, and they would then represent almost 33 percent of the T enrollment.

According to System 4, about 57 percent of the 18,322 students who would have attended school elsewhere (not including basic increases or vocational students) will shift from the regional campuses located in these three cities. The rest will come from the state universities at large. These estimates are based on a recalculation of the percentages assumed to attend regional campuses in System 1 (see Table 36).

As a result of the assumptions used in System 4, large enrollments are projected for T, with Indianapolis having the largest enrollment (15,920, including 3,195 vocational students). The regional universities in Indianapolis and Lake County will still be larger than the local T, but in South Bend, the T (with lower admission standards and vocational students) will be slightly larger than the local four-year regional campus. In the three counties, the total number of students from the county (including vocational) will increase between 50 and 55 percent during the 1967-85 period. By 1985 St. Joseph County, where the South Bend campuses are located, will have 64.3 percent of its 18-21 age group enrolled in Indiana academic or vocational postsecondary education institutions. Marion County will have 58 percent of its age group in post-secondary education, and Lake County will have 55 percent. These figures do not include county students who attend college out of state.

In addition, by 1985, Marion County and Lake County will have about 76 percent of their students enrolled in a local R_u or T. St. Joseph County will have 54 percent of its students attending the county R_u or T. Based on the assumption that 5 percent of the 18-21 age group will attend a T for vocational studies and another 5 percent will attend V, the percentages of local students in local R + T + V for Marion and Lake counties will be 85 percent and for St. Joseph County 61.5 percent.

SYSTEM 5

The last hypothetical system includes two-year institutions in 11 counties that do not have a public institution of higher education (T^1) and in 9 counties that have a public campus (T^2). System 5 is a combination of Systems 3 and 4 that is extended to additional counties. The enrollment assumptions which are similar to those in Systems 3 and 4, are detailed in Table 37.

As a result of the additional alternatives for students from adjacent counties, the total enrollment in the T^1 counties will decrease from 23,026 to 18,228. The largest of these T^1 campuses (Madison County) in System 5 will have an enrollment of 2,896, and the smallest (Cass County) will have an enrollment of 1,072. Total enrollment in the T^2 counties is projected to be almost twice that of the T^1 counties. Of the almost 36,000 students in T^2, about 17,300 represent a basic increase in enrollment, and 12,500 are vocational students. The additional students will shift from the local regional campuses (15,118) and a small portion (1,471) from state universities.

In System 5 the Indianapolis, Lake County, and South Bend two-year campuses are not as large as in System 4, where they were the only three of their kind in the state. Since additional alternatives will thus be available to adjacent county students, a reduction in the adjacent county enrollment will result. However, the Lake County and Marion County two-year campuses will still be much larger than any of the other T campuses. As discussed previously, it might be assumed that this enrollment will be divided among two or more T's within the county. Enrollment projections, based upon total county students, remain the same, although it is likely that some increase will result from a geographical distribution of opportunity in these urban areas.

The total enrollment for 20 new two-year institutions is projected to be 54,200 by 1985. This represents 26 percent of the total public system and, of course, will be a larger percentage of the state's freshman and sophomore classes. Under this system, enrollment in the regional campuses will be reduced by 17,776, and total enrollment in the R_u's and R_f's will be reduced to 57,800, or 28 percent of the public system (compared to 75,600, or 40 percent of the public system under System 1).

The smallest of the regional campuses in System 1 is the Eastern Indiana Center at Earlham, which is projected to have an enrollment of 1,998 by 1985. According to System 5, the enrollment of this campus would be reduced by 625 (134 as the result of the T in Henry County and 491 as a result of the T in Wayne County). The Kokomo regional campus, projected to have an enrollment of 2,605 in 1985 in System 1, would be reduced by 837 under System 5 (482 to T in Howard County, 221 to T in Grant County, 134 to T in Cass County). Enrollment at the regional university in Indianapolis, under the assumptions in System 5, would be reduced by 6,232, and the total undergraduate enrollment would be 19,761.

The additional 20 two-year institutions significantly will affect the rapidly expanding regional system of four-year institutions. In some cases, the nearby location of a T may affect the feasibility of expanding the program offerings at an R. In other cases it may relieve specific regional campuses from the pressure of rapid growth. The loss of 6,604 freshmen and sophomores from the state universities will also significantly shape their growth patterns. On the other hand, following the assumptions of System 5, an additional 17,302 students will be encouraged to attend college, and 12,509 (or about one-third of the state's postsecondary vocational students) will be served through the two-year insitutions.

Regional campus enrollments under System 1 (expansion of the present system) and System 5 are compared in Table 38. In addition, Table 38 includes Indiana University and Purdue University estimates of the undergraduate enrollment for their campuses. Table 38 demonstrates the significantly slower increase in regional campus undergraduate enrollment estimated under System 5 with its two-year insitutions. Whereas System 1 projects a 228 percent increase over the 1967-68 enrollment by 1985, System 5 projects only a 151 percent increase. The cost effectiveness of the smaller regional campuses shown in System 5 is a factor that is yet to be determined.

Purdue University projects enrollment only to the 1978-79 school year, and we have attempted to advance the estimates consistently for comparison purposes. No comparable self-projections are available for the Indiana State University Evansville campus or for the Eastern Indiana Center complex at Earlham. However, the totals for the projected schools are surprisingly similar to the System 1 projections despite the different methodologies used. The total for 1985 under System 1 (excluding Evansville and Eastern Indiana Center) is 67,986; the comparable self-projection is 61,603. However, System 1 assumes that undergraduates of the Indiana University Professional Division will be combined with the others in the regional university, but the self-projection does not include the Professional Division. The difference between the two estimates, then, should be less than the 6,383 indicated. The self-projections are presented in more detail in Appendix F.

Our projections, based upon an extension of the local market into 1985, show significantly higher enrollments at the Indianapolis and Lake County campuses than do the self-projections. This difference, however, is understandable since we have assumed that these campuses will become regional universities. Our view of the local market for the Fort Wayne regional university does not show as great a potential as that projected independently by Indiana University and Purdue University. Perhaps if the Indiana University and Purdue University estimates were coordinated, they would be lower. The difficulties of projecting policy, program, and student demand into the future by any method are obvious.

A final comment on System 5 should be made now. It has been assumed that enrollment in the two-year institutions (not including the increase in basic enrollment or vocational enrollment) will come from other public institutions; these reductions are summarized in Table 37. We feel that this assumption is valid in view of the similarities in cost and educational policy found among the various alternate public institutions. A two-year institution established primarily to serve local needs is not likely to disrupt patterns of enrollment in a local private institution that is serving a statewide or nationwide specialized student demand.

The reduction assumption is particularly appropriate for those counties that already have both public and private institutions. It is likely that a new public institution will draw from the students who previously attended public institutions and that the established enrollment patterns at the private universities will be relatively undisturbed (because of their special programs and admission standards, costs, and similar factors). However, this assumption may be less realistic for counties that were previously served only by a private institution of higher education. Students with needs to attend a local school may attend local private institutions, but they might switch to a local low-cost public institution if given the opportunity. For this reason, we need to comment on the 11 counties assumed as the new locations for public institutions.

Only six of these counties have a private institution of higher education located within them. The total number of undergraduates from the same county who were enrolled in private institutions in these six counties during the 1967-68 school year was 1,313--a relatively small number. The average local (same county) enrollment in the seven private institutions involved was 188 undergraduates in 1967-68, but there was a wide range among the institutions of same county undergraduates as a percentage of total undergraduates.

No county had over 500 local undergraduates enrolled in local private institutions. Nonetheless, the private institutions involved might encounter some losses as a result of the establishment of public institutions in the same county.[6] It should also be noted, however, that selection of the counties as "hypothetical" locations for public institutions required that at least 600 undergraduates from the county attend college outside the county in 1967-68.

CONCLUSION

Several comments remain to be made about our projections. Anyone who has studied the entire section will realize the difficult assumptions involved and therefore the caution required in examining these estimates. The purpose of the projections is to make explicit some of the relationships that will be involved as higher education includes more complete regional offerings and embraces vocational training. Each projection spells out the assumptions about the specific makeup of the total enrollment, and, as experience improves our knowledge about the extent of local demand, these assumptions surely can be modified. The institutional types defined are general rather than specific, and modifications in these general types will change the projections. Even the assumption of relative uniformity among the existing regional campuses in ability to satisfy local needs is unrealistic under present circumstances and may continue to be so as programs and policies continue to vary from campus to campus in the future. Furthermore, as can be seen by examining the various systems, the number and the location of institutions have a direct effect on other enrollments; there is no reason to believe that precisely the geographical scheme given in this report will be adopted by future educational policy groups.

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[6] If Marion College, for example, enrolled 30 percent of the Grant County undergraduates in 1985, 662 undergraduates would be enrolled. Basic reductions assumed in System 5 as a result of the T in Grant County include only 772 undergraduates--221 from the R_f at Kokomo, 442 from Ball State University, and 109 from the state universities at large (the remainder of the enrollment assumed for the T in Grant County results from increases in basic enrollment or vocational enrollment). If a two-year institution were located in the county, it is unlikely that Marion College would lose more than a small portion of the 662 undergraduates from that county--perhaps the 109 assumed to be shifting from the state universities at large. The private institutions in the other counties would be affected to a relatively smaller degree.

Projections for 18 years into the future have the advantage of being able to ignore the intermediate fluctuations in enrollment that result from year-to-year policy decisions. In fact, it should be cautioned that the methodology used here should not be used to project enrollment at an intermediate date without adding some modifications. The more distant date has allowed us to assume that a new or expanding institutional type will have matured to a normal level (in percentage, not constant enrollment figures) by 1985. Obviously, new or expanding institutions will have a more dramatic impact at their start, but they cannot be expected to, for example, double their enrollments every year. Just as obviously, the year in which institutions are changed significantly will affect the point of maturity of these institutions. An intermediate date such as 1975, for example, might represent the second year of a statewide system of two-year institutions, and for that year enrollment assumptions similar to those for 1985 would be unrealistic.

We have not been able to cover some policy implications in this report. The effect of changes in tuition cost, discussed in other reports in this series, is not explicitly included. We have simply assumed that local public education is inexpensive in relation to local private education or nonlocal public institutions. Likewise, our admission standards policy is generalized. Obviously, policies that would make regional institutions open-door institutions or that would eliminate tuition would have dramatic local effects.

However, neither of these extremes has been included in our assumptions. Again, it should be emphasized that these projections merely make explicit assumptions that can be modified in terms of developing policies and the improvement in our knowledge about their consequent impact on undergraduate enrollments.

One of the factors that will determine the total enrollment in higher education in Indiana in the future will be the resources devoted to higher education. Resources, which will always be limited to some degree, may be directed toward different goals. The goals of higher education should be understood, and a final set of goals should be explicit because the structure of the public system and the priorities given to the subsections of this system should lead to the desired ends.

A January, 1969 U.S. Department of Health, Education, and Welfare report to the President indicated the fundamental objectives to which any federal plan for aid to higher education should aspire. This set of goals encourages higher education systems to strive to:

--increase the number and proportion of educated people;

--increase the equality of opportunity for higher education;

--improve the quality of higher education;

--preserve the diversity in higher education and advance institutional autonomy and academic freedom;

--strengthen graduate education and institutional research and the public service capabilities of higher educational institutions;

--encourage the efficient use of resources in higher education.

As the report notes, these objectives are often conflicting.

> "Greater emphasis on one objective may mean less resources for others. For example, continued expansion of the higher education system to accommodate increasing numbers of students who wish to obtain a higher education may conflict with improving the average quality of higher education. . . .A program designed to aid the most able potential college students might well conflict with

equality of opportunity, since the poorest groups in society are underrepresented in the highest achievement groups as measured by test scores."[7] In addition, the state might decide to develop still other objectives. For example, regional institutions might be located to stimulate certain local economies. Vocational education might be developed in terms of student occupational interests or industrial manpower needs. Conflict of objectives cannot always be avoided, and a careful set of priorities should be clear.

The hypothetical structure situations discussed here cannot be considered more than rough generalizations; they should not be considered recommendations because no priorities have been established. An idea of the impact of certain structural changes with specified assumptions, however, may help to establish policy priorities.

One additional caution is required. Although enrollment figures have been estimated, the effect of the structure of the total enrollment on the quality of education to be offered has not been determined. Although our estimates for the impact of two-year institutions (regional campuses or two-year institutions with lower admission standards) are necessarily similar, the equality and quality of these various systems differ widely.

Furthermore, we have considered only the impact on undergraduate enrollments and assumed that alternate types of local institutions could serve approximately the same student needs--if policy and budget decisions so designated. That is, night programs, adult courses, community-oriented programs, or vocational and technical training could be added to the responsibility of the state universities, the two-year or four-year regional campuses, or a new two-year institution. However, there are some areas where the various kinds of institutions are obviously not the same. For example, some of the demand for regional education is coming from those who want to complete advanced degrees while carrying on their careers. In Indiana, teachers throughout the state want an opportunity to complete their certificate requirements through nearby facilities for study toward a master's degree. Young men and women in business and industry also find an increasing use for advanced degree work in business and technical areas such as engineering. This type of local graduate work is more easily provided and coordinated by the state universities through regional campuses than it is through independent two-year institutions. Again, an examination of Indiana's goals for higher education is required; it must be determined whether local undergraduate programs can be strengthened and expanded without jeopardizing the growth of local graduate programs.

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[7] Assistant Secretary for Planning and Evaluation, U.S. Department of Health, Education, and Welfare, "Toward A Long-Range Plan for Federal Financial Support for Higher Education: A Report to the President" (Washington, D.C.: U.S. Government Printing Office, January, 1969).

The following symbols will be used in Tables 32 through 38. (See pages 123-143 for a more complete discussion of the tables.)

U = state university, multiprogram, and degrees to Ph.D. (Indiana University, Purdue University, Ball State University, and Indiana State University). Although not fitting this description, Vincennes University is included in summary totals for U enrollment.

R_u = regional university, multiprogram, and master's degrees; resembles university in offerings for local undergraduates (Indianapolis, Fort Wayne, Lake County).

R_f = four-year regional campuses, multiprogram, and master's degrees; includes all 1969 regional campuses except R_u (also Eastern Indiana Center at Earlham).

R_t = two-year regional campus, sponsored by state universities, with same admission standards (locations in addition to R_u and R_f).

T = two-year institution with lower admission standards than universities and including vocational and technical training (alternate to R_t and may be in same location as R_u or R_f).

V = vocational and technical schools.

TABLE 32

Projected 1985 Enrollments, All Systems

Preliminary 1985 assumptions

Total undergraduates = 225,000
Public undergraduates = 153,000 (68% total)
Vocational students = 37,000 (10% age group 18-21)

Public + Public vocational = total public
153,000 + 37,000 = 190,000

System 1 (extension of present system)

$$U + R_u + R_f + V = \text{total public}$$

$$77{,}400 + 51{,}300 + 24{,}300 + 37{,}000 = 190{,}000$$

$$R_u + R_f = R = 75{,}600\ (49.4\%\ U + R)$$

System 2 (11 new two-year regional campuses)

$$U + R_u + R_f + 11R_t + V = \text{total public}$$

$$72{,}300 + 50{,}300 + 22{,}600 + 10{,}000 + 37{,}000 = 192{,}200$$

$$R_u + R_f + R_t = 82{,}900\ (43\%\ \text{total public})$$

System 3 (11 two-year institutions; lower standards and vocational)

$$U + R_u + R_f + 11T + V = \text{total public}$$

$$72{,}300 + 50{,}300 + 22{,}600 + 23{,}000 + 34{,}000 = 202{,}200$$

System 4 (two-year institutions like System 3, but in System 3 cities with public institutions)

$$U + R_u + R_f + 3T + V = \text{total public}$$

$$69{,}500 + 42{,}800 + 22{,}400 + 32{,}100 + 30{,}700 = 197{,}500$$

Indianapolis = 20,700 R_u + 15,900 T = 36,600
Gary = 13,300 R_u + 10,100 T = 23,400
South Bend = 5,500 R_f + 6,100 T = 11,600

System 5 (11 two-year institutions like System 3 plus 9 in cities with public institution like System 4)

$$U + R_u + R_f + 20T + V = \text{total public}$$

$$70{,}800 + 40{,}300 + 17{,}500 + 54{,}200 + 24{,}500 = 207{,}300$$

$$R_u + R_f = 57{,}800\ (27.9\%\ \text{total public})$$

$$U\ (34\%) + R\ (28\%) + T\ (26\%) + V\ (12\%) = \text{total}\ (100\%)$$

TABLE 33

System 1 Enrollment Projections, 1985

Institution	Undergraduate Enrollment 1967	Undergraduate Enrollment 1985	Percent Increase 1967-85
R_u			
Lake County	4,898	16,449	
Indianapolis	7,083	25,993	
Fort Wayne	3,889	8,821	
Total	15,870	51,263	223%
R_f			
Kokomo	997	2,605	
South Bend	2,585	7,085	
Southeast	1,593	2,843	
North Central	500	4,190	
Evansville	912	5,624	
Eastern Indiana Center	576	1,998	
Total	7,163	24,345	240
Total R_u + R_f	23,033	75,608	228
Total U	61,132	77,400	27
Total Public	84,165	153,000	82
Total Private	41,302	72,000	74

Methodology

R_u enrollment = 70% basic enrollment from county (B), plus basic enrollment from adjacent county (A) as follows: Fort Wayne, 40%; Indianapolis and Lake, 25%; plus 20% additional enrollment

R_f enrollment = 50% B (except 60% for the Southeast), plus A as follows: Southeast, 25%; South Bend, 20%; Evansville, 20%; Kokomo, 15%; North Central, 15%; Eastern Indiana Center, 15%; plus 20% additional enrollment

U = Total public enrollment minus R
77,400 = 153,000 - 75,600

(continued)

Enrollment breakdown, 1985

Total undergraduates = 225,000
Portion who are Indiana residents = 162,000 (72% of total)
Undergraduates, public = 153,000
Regional campuses ($R_u + R_f$) = 75,600 (49.4% total public)
Vocational students = 37,000 (10% age group 18-21)
Indiana students and vocational = 199,000 (54% age group 18-21)
Regional campus enrollment as % of total public (including vocational) = 39.8%

TABLE 34

System 2 Enrollment Projections, 1985

Institution	Total Undergraduates	Increase in Basic Enrollment	Reduction In			
			R_f	R_u	Ball State University	U at Large
R_t						
Madison County	1,711	380	--	--	760	571
Elkhart County	1,416	315	472	--	--	629
Grant County	993	221	221	--	442	109
Cass County	602	134	134	--	--	334
Henry County	602	134	134	--	267	67
Porter County	1,112	247	494) 247)	--	--	124
Kosciusko County	651	145	--	--	--	506
Bartholomew County	780	173	--	--	--	607
Hamilton County	727	162	--	323	--	242
Hendricks County	734	163	--	326	--	245
Johnson County	690	153	--	307	--	230
Total R_t	10,018	2,227	1,702	956	1,469	3,664

Methodology

R_t enrollment = 35% basic enrollment from county (B) plus 10% increase in B (No adjacent county enrollment is assumed, since most of these adjacent counties are adjacent to a U, R_u, or R_f; thus, the estimate of the effect of R_t is conservative).

Reductions

If there is an adjacent U, percent of B who would have attended U is reduced by 1/2; if adjacent R_f, percent of B who would have attended is reduced by 3/4; remainder of enrollment (except increase in B) is assumed to be taken from state universities at large.

For example, percentage of adjacent county students attending Ball State University in 1967 was 40% (see Table 26); therefore 20% reduction in attendance from counties with new R_t. Reduction in regional campuses is 3/4 enrollment assumed in System 1 from each adjacent county involved.

Summary of reductions

U = 5,133 (1,469 + 3,664)
R = 2,658 (1,702 + 956)

Largest reductions: Indianapolis R_u by 956; Ball State University by 1,469.

TABLE 35

System 3 Enrollment Projections, 1985

Institution	Total Enrollment	Increase in Basic Enrollment	Vocational Enrollment	Vocational Enrollment as a Percent of Total T
T				
Madison County	2,969	1,095	543	18.3%
Elkhart County	3,222	1,645	476	14.8
Grant County	2,357	1,248	337	14.3
Cass County	1,402	791	143	10.2
Henry County	1,599	929	202	12.6
Porter County	2,985	1,819	301	10.1
Kosciusko County	1,397	717	174	12.5
Bartholomew County	1,503	635	261	17.4
Hamilton County	1,815	1,074	176	9.7
Hendricks County	1,951	1,193	187	9.6
Johnson County	1,826	1,066	223	12.2
Total	23,026	12,212	3,023	13.1

Methodology

T enrollments = 35% basic enrollment from county (B) plus 20% increase in B, plus 10% increase basic enrollment from adjacent county (A), plus vocational enrollment that is 5% of county age group (18-21). Note: no adjacent county enrollment is assumed if that adjacent county also has a T, and only 5% increase in A if adjacent county is also adjacent to another T. Enrollment from Marion County in adjacent counties is 2% each, since it is adjacent to 3 T.

Reductions same as System 2; V enrollment is reduced by amount of vocational enrollment in T.

TABLE 36

System 4 Enrollment Projections, 1985

Institution	Total Undergraduates	Increase in Basic Enrollment	Vocational Enrollment (% of total)	Reductions	
				R_u & R_f	U at Large
T (in 3 cities)					
Indianapolis	15,920	3,640	3,195 (20%)	5,276 R_u	3,809
Gary	10,133	2,175	2,247 (22)	3,236 R_u	2,475
South Bend	6,059	1,673	850 (14)	1,895 R_f	1,641
Total T	32,112	7,488	6,292 (20)	10,407	7,925

System 4 totals: 69,500 U + 42,800 R_u + 22,400 R_f + 32,100 T + 30,700 V = 197,500

Methodology

T enrollments = 20% basic enrollment from county (B) + 10% increase in B, plus 10% basic enrollment from adjacent counties (A) + 10% increase in A, plus vocational enrollment that is 5% of county age group 18-21, plus 20% additional enrollment.

Reductions = R_u enrollments reduced to 60% B, 15% A, and 15% additional enrollment; R_f enrollment reduced to 45% B, 15% A, and 10% additional enrollment; remainder of reduction is assumed for state universities at large.

Enrollment breakdown

	Indianapolis	Gary	South Bend
1985 R enrollment	20,700	13,300	5,500 (R_f)
1985 T enrollment	15,900	10,100	6,100
Total R + T	36,600	23,400	11,600
Students from county (including vocational)			
1967	18,409	11,128	5,163
1985	37,092	24,713	11,107
Increase 1967-85	50.4%	55.0%	53.5%
% of 18-21 age, 1985	58.1%	55.0%	64.3%
County students attending R & T (1985)	28,315	18,790	5,970
% of 1985 county students	76.3%	76.0%	53.8%
% of 1985 county students in county R + T + V (assuming V = 5% county age group)	85.0%	85.0%	61.5%

TABLE 37

System 5 Enrollment Projections, 1985

Institutions	Total Enrollment	Increase in Basic Enrollment	Vocational Enrollment	Reductions	
T^1 (counties with no public institutions)					
Madison County	2,896	1,022	543		
Elkhart County	2,314	737	476		
Grant County	2,044	935	337		
Cass County	1,072	461	143		
Henry County	1,235	565	202		
Porter County	1,709	543	301		
Kosciusko County	1,310	630	174		
Bartholomew County	1,503	635	261		
Hamilton County	1,284	543	176		
Hendricks County	1,493	735	187		
Johnson County	1,368	608	223		
Total T^1	18,228	7,414	3,023		
T^2 (counties with other public institutions)				R_u & Rf	U
Marion County	11,753	2,976	3,195	5,276	306
Lake County	7,826	1,903	2,247	3,236	440
St. Joseph County	3,532	963	863	1,706	
Vanderburgh County	3,356	1,086	592	1,678	
LaPorte County	1,512	396	402	714	
Howard County	1,227	387	358	482	
Wayne County	1,209	406	312	491	
Tippecanoe County	1,820	667	428		725

(continued)

	Total Enrollment	Increase in Basic Enrollment	Vocational Enrollment	Reductions R_u & R_f	U
Allen County	3,728	1,104	1,089	1,535	
Total T^2	35,963	9,888	9,486	15,118	1,471
Total T ($T^1 + T^2$)	54,191	17,302	12,509	17,776	6,604

System 5 totals:

$$70{,}800\ U + 40{,}300\ R_u + 17{,}500\ R_f + 54{,}200\ T + 24{,}500\ V = 207{,}300$$

Reductions in U, R_u, and R_f as a result of T^1 and T^2:

	T^1	T^2	Total T
U	5,133	1,471	6,604
R_u	956	10,047	11,003
R_f	1,702	5,071	6,773
Total	7,791	16,589	

Methodology

T^1 enrollments = 35% basic enrollment from county (B), plus 20% increase in B, plus 10% increase in basic enrollment from adjacent county (A), plus vocational enrollment that is 5% of county age group 18-21. (This is the same as in System 3, but no adjacent increase is expected if adjacent county has a T^2, and only 5% adjacent increase is expected if adjacent county is also adjacent to a T^2 or T^1. 100 students from Marion County are assumed for each T^1 adjacent to it.)

T^2 enrollments = 20% B, plus 10% increase in B, plus 10% increase in A, and vocational enrollment same as T^1.

Reductions

Reductions for T^1 are the same as in Systems 2 and 3. T^2 reductions are the same as in System 4 for Lake and Marion counties; for others, the total reduction is from local public institutions.

TABLE 38

Regional Campus Undergraduate Enrollment 1985
System 1, System 5, and Self-Projections

	Actual 1967-68	1985 #1	1985 #5	1985 Self-Projections*		
				I.U.	P.U.	Total
Indianapolis	7,080	25,993	19,761	9,974+	7,204	17,178#
Lake County	4,898	16,449	12,719	6,338	7,017	13,335
Fort Wayne	3,889#	8,821	7,286	7,805#	6,331	14,136#
Kokomo	997	2,605	1,768	2,662		2,662
South Bend	2,585	7,085	4,907	7,369		7,369
Southeast	1,593	2,843	2,843	3,992		3,992
North Central	500	4,190	3,229		2,931	2,931
Evansville	912	5,624	3,946			n.a.
Eastern Indiana Center	576	1,998	1,343			n.a.
	23,030	75,608	57,802			

Total enrollment, undergraduates 1967-68 = 23,030
System 1, 1985 total 75,608 (increase 228%)
System 5, 1985 total 57,802 (increase 151%)

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*For detail and methodology, see Appendix F. Indiana University projections were available through 1985. Purdue University projections, which were presented through 1978-79, were advanced to 1985 for comparison.

+Does not include Indiana University Professional Division (Systems 1 and 5 assume a combination of these undergraduates with the other regional campus undergraduates and include them in the totals).

#Does not include Indiana University Division of General and Technical Studies, whose enrollment is projected at 2,736 in 1985 by Indiana University. (Systems 1 and 5 do not include DGTS in the regional university enrollment at Fort Wayne).

APPENDIX A

1968 FRESHMAN STUDENT CENSUS

Appendix Table A-2 is taken from Thomas M. Elliott, College Attendance in Indiana (Bloomington, Ind.: Regional Campus Coordinating Committee, August 4, 1969). Tables A-3 through A-6 were developed by the same study that this report was based on.

The category "Indiana freshmen in college anywhere" was estimated by applying migration figures developed in 1958 and 1963 national migration studies. As Elliott notes, "Student migration studies conducted in 1958 and 1963 found almost identical rates of out-migration of first-time students from the state of Indiana, with the difference appearing only in the fourth decimal place of the ratio.* When both rates were used to estimate the number of out-migrants for 1968, the results differed by only eleven students. For these reasons it was decided to apply the same rate to the 1968 data, 16.5% of all students attending college from Indiana, as was utilized in the 1960 Freshman Student Census. Thus the number of Indiana resident freshmen attending college at out-of-state institutions . . . was estimated to be 7,673." (Thomas M. Elliott, Report of the 1968 Indiana Freshman Student Census, Research Report RCCC 69-1 (Bloomington, Ind.: Regional Coordinating Committee, May 26, 1969).

TABLE A-1

County Codes Used for 1968 Freshman Student Census Data

INDIANA COUNTIES (93=Total State)

Adams	01	Franklin	24	Lawrence	47	Rush	70
Allen	02	Fulton	25	Madison	48	St. Joseph	71
Bartholomew	03	Gibson	26	Marion	49	Scott	72
Benton	04	Grant	27	Marshall	50	Shelby	73
Blackford	05	Greene	28	Martin	51	Spencer	74
Boone	06	Hamilton	29	Miami	52	Starke	75
Brown	07	Hancock	30	Monroe	53	Steuben	76
Carroll	08	Harrison	31	Montgomery	54	Sullivan	77
Cass	09	Hendricks	32	Morgan	55	Switzerland	78
Clark	10	Henry	33	Newton	56	Tippecanoe	79
Clay	11	Howard	34	Nobel	57	Tipton	80
Clinton	12	Huntington	35	Ohio	58	Union	81
Crawford	13	Jackson	36	Orange	59	Vanderburgh	82
Daviess	14	Jasper	37	Owen	60	Vermillion	83
Dearborn	15	Jay	38	Parke	61	Vigo	84
Decatur	16	Jefferson	39	Perry	62	Wabash	85
DeKalb	17	Jennings	40	Pike	63	Warren	86
Delaware	18	Johnson	41	Porter	64	Warrick	87
Dubois	19	Knox	42	Posey	65	Washington	88
Elkhart	20	Kosciusko	43	Pulaski	66	Wayne	89
Fayette	21	LaGrange	44	Putnam	67	Wells	90
Floyd	22	Lake	45	Randolph	68	White	91
Fountain	23	La Porte	46	Ripley	69	Whitley	92

TABLE A-2

Counties Ranked by Percent of High School Graduates Enrolled as Freshmen in Indiana Colleges and Universities and Percent of Freshmen in Public Institutions' Main and Regional Campuses

Indiana County	1968 Rank	% Fresh. to H.S. Grads. 1968 (a)	1968 Indiana Insts. Fr. (b)	1968 % Fresh. in Ind. Pub. Insts.		1960 Rank	% Fresh. to H.S. Grads. 1960 (c)	1960 Indiana Insts. Fr. (b)	1960 % Fresh. in Ind. Pub. Insts.	
				Main Campuses	Reg. Campuses				Main Campuses	Reg. Campuses
Total Indiana		55.21%	38,948	50.8%	34.2%		45.43%	22,843	48.2%	24.9%
Monroe	1	76.32	535	92.1	4.1	2	57.28	291	96.0	2.0
Allen	2	71.54	2,624	24.2	65.5	9	50.53	1,188	28.6	50.4
Marion	3	68.90	6,282	46.8	43.9	1	71.40	4,107	39.5	33.8
Howard	4	68.06	716	35.1	58.7	3	56.75	374	43.2	43.3
Pulaski	5	66.46	105	74.2	22.7	80	26.58	42	50.0	33.3
Dearborn	6	66.32	256	66.0	19.1	84	23.81	70	73.3	6.7
Fulton	7	65.28	141	65.9	4.6	45	34.31	94	68.7	2.4
Whitley	8	64.77	193	24.0	59.0	53	32.85	91	35.9	23.1
Knox	9	62.28	360	91.2	1.5	21	43.76	221	22.2	3.7
St. Joseph	10	60.43	2,207	37.8	46.9	8	51.82	1,308	41.9	38.8
Tipton	11	60.40	183	49.4	39.7	27	41.00	98	57.2	21.4
Hendricks	12	58.82	430	63.2	30.6	39	36.70	171	68.7	18.4
Tippecanoe	13	58.17	712	94.6	0.6	4	54.99	435	93.4	1.3
Jennings	14	57.02	138	52.8	26.0	89	19.80	39	67.7	8.8
Floyd	15	56.43	395	27.0	64.5	18	44.21	210	29.4	62.8
Hancock	16	56.29	237	62.3	29.4	61	32.27	101	53.5	20.1
Cass	17	55.85	315	62.4	28.6	10	50.26	197	72.2	16.0
Lake	18	55.79	4,568	38.7	52.7	5	53.58	2,762	30.5	56.4
DeKalb	19	55.40	236	35.2	49.3	23	43.40	161	42.0	26.8
Wells	20	54.78	212	38.4	52.8	35	38.29	121	47.6	23.8
Vanderburgh	21	54.48	1,442	34.7	34.9	19	43.94	881	23.8	1.1
Wabash	22	53.61	267	59.1	13.8	30	40.00	168	49.0	9.5
Boone	23	52.88	220	76.6	20.3	29	40.00	128	66.3	16.4
Noble	24	52.67	217	35.5	49.0	46	34.24	113	50.5	15.5
Madison	25	52.29	995	73.2	9.0	15	45.82	598	73.9	5.9
Rush	26	52.27	161	70.3	10.1	62	32.00	80	58.0	18.8
Huntington	27	52.02	271	38.6	34.2	13	46.08	194	40.3	19.3
Clark	28	51.94	562	21.9	72.3	68	29.99	224	26.6	62.5

(continued)

Indiana County	1968 Rank	% Fresh. to H.S. Grads. 1968 (a)	1968 Indiana Insts. Fr. (b)	1968 % Fresh. in Ind. Pub. Insts. Main Campuses	1968 % Fresh. in Ind. Pub. Insts. Reg. Campuses	1960 Rank	% Fresh. to H.S. Grads. 1960 (c)	1960 Indiana Insts. Fr. (b)	1960 % Fresh. in Ind. Pub. Insts. Main Campuses	1960 % Fresh. in Ind. Pub. Insts. Reg. Campuses
La Porte	29	51.44	824	50.3	46.3	26	42.15	440	56.4	29.8
Montgomery	30	51.12	250	77.8	5.7	58	32.37	112	68.8	5.2
Shelby	31	50.61	248	72.2	21.9	40	36.46	132	67.2	14.2
Hamilton	32	50.45	392	67.3	25.8	42	35.22	174	67.1	19.5
Adams	33	48.97	213	39.5	40.3	41	35.80	116	36.0	20.0
Daviess	34	48.70	188	81.5	1.7	37	37.11	141	38.0	6.6
Bartholomew	35	48.62	370	77.3	8.3	76	28.09	159	62.5	8.1
Grant	36	48.50	452	58.6	6.7	22	43.64	309	56.6	9.8
Vigo	37	48.38	704	90.3	2.5	6	53.16	640	88.5	0.9
Lawrence	38	48.14	259	77.3	8.8	49	33.47	168	79.8	6.3
Porter	39	47.71	532	54.3	37.2	17	44.38	308	48.9	26.5
Harrison	40	47.65	142	29.2	50.4	73	28.73	79	32.3	51.5
Jasper	41	47.49	123	76.1	7.1	51	33.07	83	70.4	8.5
Benton	42	47.47	103	85.1	5.3	70	28.93	46	87.5	0.0
Wayne	43	46.86	492	67.3	21.5	32	39.10	305	64.8	17.6
Clinton	44	46.83	214	78.9	12.7	47	33.70	154	74.3	12.1
Delaware	45	46.77	803	93.5	1.4	11	47.69	568	93.3	1.4
Warrick	46	46.56	169	37.8	19.9	71	28.93	81	31.4	4.3
Sullivan	47	46.49	139	85.9	3.9	56	32.46	111	86.3	2.1
Johnson	48	46.46	348	46.7	37.2	33	38.96	157	35.6	13.0
Franklin	49	46.43	78	47.2	15.3	87	20.39	42	38.9	0.0
Owen	50	46.10	65	79.3	13.3	69	29.85	40	74.2	22.9
Clay	51	46.02	156	88.2	7.6	12	47.69	134	88.7	2.6
Elkhart	52	45.55	777	46.8	26.0	14	45.97	502	40.0	20.7
Fayette	53	45.14	181	56.2	37.7	59	32.35	88	81.6	10.5
Jefferson	54	44.86	166	52.9	26.8	43	34.62	90	40.2	32.5
Carroll	55	44.03	107	72.7	12.1	66	30.29	53	82.2	8.9
Blackford	56	43.26	93	74.4	9.3	24	42.63	81	71.4	1.4
Gibson	57	43.24	176	53.1	11.7	16	45.77	157	26.7	2.2
Orange	58	42.79	92	75.3	10.6	57	32.43	72	43.5	32.3
Randolph	59	42.79	175	84.5	3.7	31	39.46	161	78.3	2.9
Warren	60	42.73	47	90.9	0.0	85	23.00	23	85.0	0.0
Jackson	61	42.63	217	76.6	11.6	67	30.18	115	63.6	10.1
Pike	62	42.38	64	59.3	10.2	20	43.81	85	11.0	4.1
Newton	63	42.13	83	79.2	11.7	48	33.58	46	67.5	5.0
Greene	64	42.09	173	87.4	4.4	28	40.24	132	76.1	9.7

(continued)

Indiana County	1968 Rank	% Fresh. to H.S. Grads. 1968 (a)	1968 Indiana Insts. Fr. (b)	1968 % Fresh. in Ind. Pub. Insts.		1960 Rank	% Fresh. to H.S. Grads. 1960 (c)	1960 Indiana Insts. Fr. (b)	1960 % Fresh. in Ind. Pub. Insts.	
				Main Campuses	Reg. Campuses				Main Campuses	Reg. Campuses
Dubois	65	41.73	212	59.6	4.1	55	32.51	118	38.6	5.0
Parke	66	41.40	77	90.1	1.4	77	27.94	57	87.7	4.1
Jay	67	41.12	132	79.0	6.6	44	34.48	100	85.2	3.4
Washington	68	40.39	103	44.2	41.1	75	28.17	60	63.5	32.7
Vermillion	69	40.23	103	92.6	3.2	79	27.35	67	86.3	3.4
White	70	40.14	171	79.6	3.8	50	33.22	95	84.2	7.3
Fountain	71	39.54	104	90.6	2.1	63	31.16	67	93.1	1.7
Ohio	72	39.13	18	76.5	5.9	90	15.91	7	100.0	0.0
Henry	73	38.83	266	78.9	8.3	25	42.41	232	76.3	10.6
Putnam	74	38.76	150	70.3	8.0	52	33.00	99	67.0	5.9
Spencer	75	37.65	93	43.5	19.7	7	52.61	111	32.6	2.1
Kosciusko	76	37.33	271	44.0	30.6	34	38.77	176	50.4	13.7
Steuben	77	37.29	88	47.4	19.8	38	36.82	74	62.5	12.5
Starke	78	37.29	110	77.2	13.9	64	31.14	71	78.7	8.2
Decatur	79	37.22	115	76.7	14.2	72	28.82	66	59.6	12.3
Brown	80	37.14	39	66.7	8.3	92	12.90	8	71.4	14.3
Union	81	37.14	39	69.4	25.0	60	32.35	22	63.2	0.0
Morgan	82	35.66	199	72.9	26.8	86	21.61	78	61.2	20.9
Perry	83	35.55	107	47.5	12.1	74	28.72	56	50.0	0.0
Crawford	84	35.48	44	24.9	43.9	82	25.00	30	23.1	34.6
LaGrange	85	33.64	110	43.9	22.8	81	25.65	49	47.6	11.9
Posey	86	32.89	100	44.6	20.7	65	30.43	70	28.4	3.3
Miami	87	31.55	165	53.3	30.3	36	37.56	160	50.4	32.1
Marshall	88	30.83	283	49.4	26.6	54	32.52	201	52.4	14.5
Martin	89	30.68	54	78.0	10.0	83	24.65	35	60.0	3.3
Ripley	90	29.77	145	80.6	3.7	88	20.27	59	78.4	9.9
Scott	91	27.83	59	27.3	56.4	78	27.38	46	57.5	30.3
Switzerland	92	27.06	23	90.9	4.5	91	14.63	12	72.7	18.2

(a) High school graduates estimated from 1968 12th grade enrollment. Both public and private high schools were included.

(b) Includes freshmen from Indiana attending Indiana institutions only.

(c) 1960 high school graduates include both public and private high schools.

TABLE A-3

Indiana Counties Ranked by Percent of High School Graduates Who Were Freshmen in Indiana Institutions in 1968 and 1960, Listed in 1968 Rank Order

1968 Rank	County Code	H.S. Grads.	Est. 1968 Ind. Fr.	Percent Attend.	1960 Rank	H.S. Grads.	Est. 1960 Ind. Fr.	Percent Attend.
0	93	70,551	38,948	55.21%	0	50,284	22,843	45.43%
1	53	701	535	76.32	2	508	291	57.28
2	2	3,668	2,624	71.54	9	2,351	1,188	50.53
3	49	9,117	6,282	68.90	1	5,752	4,107	71.40
4	34	1,052	716	68.06	3	659	374	56.75
5	66	158	105	66.46	80	158	42	26.58
6	15	386	256	66.32	84	294	70	23.81
7	25	216	141	65.28	45	274	94	34.31
8	92	298	193	64.77	53	277	91	32.85
9	42	578	360	62.28	21	505	221	43.76
10	71	3,652	2,207	60.43	8	2,524	1,308	51.82
11	80	303	183	60.40	27	239	98	41.00
12	32	731	430	58.82	39	466	171	36.70
13	79	1,224	712	58.17	4	791	435	54.99
14	40	242	138	57.02	89	197	39	19.80
15	22	700	395	56.43	18	475	210	44.21
16	30	421	237	56.29	61	313	101	32.27
17	9	564	315	55.85	10	392	197	50.26
18	45	8,188	4,568	55.79	5	5,155	2,762	53.58
19	17	426	236	55.40	23	371	161	43.40
20	90	387	212	54.78	35	316	121	38.29
21	82	2,647	1,442	54.48	19	2,005	881	43.94
22	85	498	267	53.61	30	420	168	40.00
23	6	416	220	52.88	29	320	128	40.00
24	57	412	217	52.67	46	330	113	34.24
25	48	1,903	995	52.29	15	1,305	598	45.82
26	70	308	161	52.27	62	250	80	32.00
27	35	521	271	52.02	13	421	194	46.08
28	10	1,082	562	51.94	68	747	224	29.99
29	46	1,602	824	51.44	26	1,044	440	42.15
30	54	489	250	51.12	58	346	112	32.37
31	73	490	248	50.61	40	362	132	36.46
32	29	777	392	50.45	42	494	174	35.22
33	1	435	213	48.97	41	324	116	35.80

(continued)

1968 Rank	County Code	H.S. Grads.	Est. 1968 Ind. Fr.	Percent Attend.	1960 Rank	H.S. Grads.	Est. 1960 Ind. Fr.	Percent Attend.
34	14	386	188	48.70%	37	380	141	37.11%
35	3	761	370	48.62	76	566	159	28.09
36	27	932	452	48.50	22	708	309	43.64
37	84	1,455	704	48.38	6	1,204	640	53.16
38	47	538	259	48.14	49	502	168	33.47
39	64	1,115	532	47.71	17	694	308	44.38
40	31	298	142	47.65	73	275	79	28.73
41	37	259	123	47.49	51	251	83	33.07
42	4	217	103	47.47	70	159	46	28.93
43	89	1,050	492	46.86	32	780	305	39.10
44	12	457	214	46.83	47	457	154	33.70
45	18	1,717	803	46.77	11	1,191	568	47.69
46	87	363	169	46.56	71	280	81	28.93
47	77	299	139	46.49	56	342	111	32.46
48	41	749	348	46.46	33	403	157	38.96
49	24	168	78	46.43	87	206	42	20.39
50	60	141	65	46.10	69	134	40	29.85
51	11	339	156	46.02	12	281	134	47.69
52	20	1,706	777	45.55	14	1,092	502	45.97
53	21	401	181	45.14	59	272	88	32.35
54	39	370	166	44.86	43	260	90	34.62
55	8	243	107	44.03	66	175	53	30.29
56	5	215	93	43.26	24	190	81	42.63
57	26	407	176	43.24	16	343	157	45.77
58	59	215	92	42.79	57	222	72	32.43
59	68	409	175	42.79	31	408	161	39.46
60	86	110	47	42.73	85	100	23	23.00
61	36	509	217	42.63	67	381	115	30.18
62	63	151	64	42.38	20	194	85	43.81
63	56	197	83	42.13	48	137	46	33.58
64	28	411	173	42.09	28	328	132	40.24
65	19	508	212	41.73	55	363	118	32.51
66	61	186	77	41.40	77	204	57	27.94
67	38	321	132	41.12	44	290	100	34.48
68	88	255	103	40.39	75	213	60	28.17
69	83	256	103	40.23	79	245	67	27.35
70	91	426	171	40.14	50	286	95	33.22
71	23	263	104	39.54	63	215	67	31.16
72	58	46	18	39.13	90	44	7	15.91
73	33	685	266	38.83	25	547	232	42.41

(continued)

1968 Rank	County Code	H.S. Grads.	Est. 1968 Ind. Fr.	Percent Attend.	1960 Rank	H.S. Grads.	Est. 1960 Ind. Fr.	Percent Attend.
74	67	387	150	38.76%	52	300	99	33.00%
75	74	247	93	37.65	7	211	111	52.61
76	43	726	271	37.33	34	454	176	38.77
77	76	236	88	37.29	38	201	74	36.82
78	75	295	110	37.29	64	228	71	31.14
79	16	309	115	37.22	72	229	66	28.82
80	7	105	39	37.14	92	62	8	12.90
81	81	105	39	37.14	60	68	22	32.35
82	55	558	199	35.66	86	361	78	21.61
83	62	301	107	35.55	74	195	56	28.72
84	13	124	44	35.48	82	120	30	25.00
85	44	327	110	33.64	81	191	49	25.65
86	65	304	100	32.89	65	230	70	30.43
87	52	523	165	31.55	36	426	160	37.56
88	50	918	283	30.83	54	618	201	32.52
89	51	176	54	30.68	83	142	35	24.65
90	69	487	145	29.77	88	291	59	20.27
91	72	212	59	27.83	78	168	46	27.38
92	78	85	23	27.06	91	82	12	14.63

TABLE A-4

Indiana Counties Ranked by Percent of High School Graduates Who Were Freshmen in College Anywhere in 1968 and 1960, Listed in 1968 Rank Order

1968 Rank	County Code	H.S. Grads.	Est. 1968 Fr. Anywhere	Percent Attend.	1960 Rank	H.S. Grads.	Est. 1960 Fr. Anywhere	Percent Attend.
0	93	70,551	46,620	66.08%	0	50,284	27,343	54.38%
1	53	701	640	91.30	2	508	348	68.50
2	2	3,668	3,140	85.61	9	2,351	1,422	60.48
3	49	9,117	7,519	82.47	1	5,752	4,916	85.47
4	34	1,052	857	81.46	3	659	447	67.83
5	15	386	306	79.27	84	294	83	28.23
6	66	158	125	79.11	80	158	50	31.65
7	25	216	168	77.78	46	274	112	40.88
8	92	298	231	77.52	53	277	108	38.99
9	42	578	430	74.39	20	505	264	52.28
10	71	3,652	2,641	72.32	8	2,524	1,565	62.00
11	80	303	219	72.28	27	239	117	48.95
12	32	731	514	70.31	39	466	204	43.78
13	79	1,224	852	69.61	4	791	520	65.74
14	40	242	165	68.18	89	197	46	23.35
15	22	700	472	67.43	18	475	251	52.84
16	30	421	283	67.22	60	313	120	38.34
17	9	564	377	66.84	10	392	235	59.95
18	45	8,188	5,467	66.77	5	5,155	3,306	64.13
19	17	426	282	66.20	23	371	192	51.75
20	90	387	253	65.37	35	316	144	45.57
21	82	2,647	1,726	65.21	19	2,005	1,054	52.57
22	85	498	319	64.06	29	420	201	47.86
23	6	416	263	63.22	30	320	153	47.81
24	57	412	259	62.86	45	330	135	40.91
25	48	1,903	1,191	62.59	15	1,305	715	54.79
26	70	308	192	62.34	62	250	95	38.00
27	35	521	324	62.19	13	421	232	55.11
28	10	1,082	672	62.11	68	747	268	35.88
29	46	1,602	986	61.55	26	1,044	526	50.38
30	54	489	299	61.15	57	346	134	38.73
31	73	490	296	60.41	40	362	158	43.65
32	29	777	469	60.36	42	494	208	42.11
33	1	435	254	58.39	41	324	138	42.59

(continued)

1968 Rank	County Code	H.S. Grads.	Est. 1968 Fr. Anywhere	Percent Attend.	1960 Rank	H.S. Grads.	Est. 1960 Fr. Anywhere	Percent Attend.
34	14	386	225	58.29%	37	380	168	44.21%
35	3	761	442	58.08	75	566	190	33.57
36	27	932	541	58.05	21	708	369	52.12
37	84	1,455	842	57.87	6	1,204	766	63.62
38	47	538	310	57.62	49	502	201	40.04
39	64	1,115	636	57.04	17	694	368	53.03
40	37	259	147	56.76	51	251	99	39.44
41	31	298	169	56.71	74	275	94	34.18
42	4	217	123	56.68	70	159	55	34.59
43	12	457	256	56.02	47	457	184	40.26
44	89	1,050	588	56.00	32	780	365	46.79
45	18	1,717	961	55.97	11	1,191	679	57.01
46	87	363	202	55.65	73	280	96	34.29
47	41	749	416	55.54	33	403	187	46.40
48	77	299	166	55.52	59	342	132	38.60
49	24	168	93	55.36	87	206	50	24.27
50	11	339	186	54.87	12	281	160	56.94
51	60	141	77	54.61	69	134	47	35.07
52	20	1,706	930	54.51	14	1,092	600	54.95
53	21	401	216	53.87	58	272	105	38.60
54	39	370	198	53.51	43	260	107	41.15
55	8	243	128	52.67	66	175	63	36.00
56	5	215	111	51.63	25	190	96	50.53
57	26	407	210	51.60	16	343	187	54.52
58	59	215	110	51.16	56	222	86	38.74
59	68	409	209	51.10	31	408	192	47.06
60	86	110	56	50.91	85	100	27	27.00
61	36	509	259	50.88	67	381	137	35.96
62	28	411	207	50.36	28	328	158	48.17
63	63	151	76	50.33	22	194	101	52.06
64	56	197	99	50.25	48	137	55	40.15
65	19	508	253	49.80	54	363	141	38.84
66	61	186	92	49.46	76	204	68	33.33
67	38	321	158	49.22	44	290	119	41.03
68	88	255	123	48.24	77	213	71	33.33
69	83	256	123	48.05	79	245	80	32,65
70	91	426	204	47.89	50	286	113	39.51
71	23	263	124	47.15	63	215	80	37.21
72	33	685	318	46.42	24	547	277	50.64
73	67	387	179	46.25	52	300	118	39.33

1968 Rank	County Code	H.S. Grads.	Est. 1968 Fr. Anywhere	Percent Attend.	1960 Rank	H.S. Grads.	Est. 1960 Fr. Anywhere	Percent Attend.
74	58	46	21	45.65%	90	44	8	18.18%
75	74	247	111	44.94	7	211	132	62.56
76	43	726	324	44.63	34	454	210	46.26
77	76	236	105	44.49	38	201	88	43.78
78	75	295	131	44.41	64	228	84	36.84
79	16	309	137	44.34	71	229	79	34.50
80	7	105	46	43.81	92	62	9	14.52
81	81	105	46	43.81	61	68	26	38.24
82	55	558	238	42.65	86	361	93	25.76
83	62	301	128	42.52	72	195	67	34.36
84	13	124	52	41.94	82	120	35	29.17
85	44	327	131	40.06	81	191	58	30.37
86	65	304	119	39.14	65	230	83	36.09
87	52	523	197	37.67	36	426	191	44.84
88	50	918	338	36.82	55	618	240	38.83
89	51	176	64	36.36	83	142	41	28.87
90	69	487	173	35.52	88	291	70	24.05
91	72	212	70	33.02	78	168	55	32.74
92	78	85	27	31.76	91	82	14	17.07

TABLE A-5

Indiana Counties' Ranked by Percent of Births 18 Years Previous Who Were Freshmen in Indiana Institutions in 1968 and 1960, Listed in 1968 Rank Order

1968 Rank	County Code	1950 Births	Est. 1968 Ind. Fr.	Percent Attend.	1960 Rank	1942 Births	Est. 1960 Ind. Fr.	Percent Attend.
0	93	93,256	38,948	41.76%	0	73,706	22,843	30.99%
1	32	525	430	82.06	1	325	171	52.62
2	64	734	532	72.48	2	655	308	47.02
3	29	639	392	61.35	7	478	174	36.40
4	30	398	237	59.55	42	375	101	26.93
5	2	4,620	2,624	56.80	13	3,425	1,188	34.69
6	41	614	348	56.68	11	437	157	35.93
7	34	1,406	716	50.92	9	1,036	374	36.10
8	40	271	138	50.92	87	259	39	15.06
9	80	366	183	50.00	25	312	98	31.41
10	53	1,075	535	49.77	6	790	291	36.84
11	90	444	212	47.75	18	362	121	33.43
12	46	1,759	824	46.84	40	1,612	440	27.30
13	45	9,876	4,568	46.25	8	7,615	2,762	36.27
14	49	13,837	6,282	45.40	4	10,519	4,107	39.04
15	6	488	220	45.08	37	452	128	28.32
16	92	431	193	44.78	34	314	91	28.98
17	85	611	267	43.70	19	519	168	32.37
18	73	580	248	42.76	33	450	132	29.33
19	10	1,336	562	42.07	51	902	224	24.83
20	17	564	236	41.84	23	510	161	31.57
21	48	2,390	995	41.63	32	2,024	598	29.55
22	25	340	141	41.47	16	275	94	34.18
23	79	1,734	712	41.06	10	1,205	435	36.10
24	15	624	256	41.03	86	458	70	15.28
25	71	5,469	2,207	40.35	14	3,798	1,308	34.44
26	70	403	161	39.95	57	344	80	23.26
27	35	687	271	39.45	17	569	194	34.09
28	91	434	171	39.40	21	296	95	32.09
29	57	551	217	39.38	48	447	113	25.28
30	9	805	315	39.13	36	682	197	28.89
31	42	934	360	38.54	44	860	221	25.70

(continued)

1968 Rank	County Code	1950 Births	Est. 1968 Ind. Fr.	Percent Attend.	1960 Rank	1942 Births	Est. 1960 Ind. Fr.	Percent Attend.
32	3	966	370	38.30%	56	679	159	23.42%
33	22	1,037	395	38.09	47	830	210	25.30
34	50	746	283	37.94	15	584	201	34.42
35	7	103	39	37.86	92	104	8	7.69
36	67	398	150	37.69	24	315	99	31.43
37	54	670	250	37.31	43	428	112	26.17
38	56	226	83	36.73	59	199	46	23.12
39	4	284	103	36.27	69	228	46	20.18
40	43	748	271	36.23	27	561	176	31.37
41	18	2,226	803	36.07	29	1,822	568	31.17
42	39	464	166	35.78	66	421	90	21.38
43	1	596	213	35.74	53	476	116	24.37
44	20	2,185	777	35.56	31	1,657	502	30.30
45	82	4,058	1,442	35.53	28	2,814	881	31.31
46	87	476	169	35.50	58	350	81	23.14
47	31	402	142	35.32	76	423	79	18.68
48	14	539	188	34.88	62	643	141	21.93
49	55	578	199	34.43	70	390	78	20.00
50	66	305	105	34.43	81	253	42	16.60
51	69	426	145	34.04	79	351	59	16.81
52	12	633	214	33.81	41	571	154	26.97
53	8	322	107	33.23	64	245	53	21.63
54	27	1,364	452	33.14	46	1,221	309	25.31
55	19	647	212	32.77	60	518	118	22.78
56	84	2,160	704	32.59	12	1,789	640	35.77
57	47	795	259	32.58	65	784	168	21.43
58	11	481	156	32.43	5	345	134	38.84
59	68	542	175	32.29	26	513	161	31.38
60	60	205	65	31.71	73	203	40	19.70
61	75	348	110	31.61	67	337	71	21.07
62	77	442	139	31.45	45	436	111	25.46
63	36	691	217	31.40	63	526	115	21.86
64	88	332	103	31.02	77	332	60	18.07
65	28	559	173	30.95	50	531	132	24.86
66	21	588	181	30.78	78	509	88	17.29
67	37	402	123	30.60	54	342	83	24.27
68	23	341	104	30.50	75	353	67	18.98
69	5	307	93	30.29	30	265	81	30.57
70	89	1,632	492	30.15	52	1,242	305	24.56

(continued)

1968 Rank	County Code	1950 Births	Est. 1968 Ind. Fr.	Percent Attend.	1960 Rank	1942 Births	Est. 1960 Ind. Fr.	Percent Attend.
71	74	314	93	29.62%	3	278	111	39.93%
72	61	264	77	29.17	71	286	57	19.93
73	81	135	39	28.89	61	97	22	22.68
74	86	164	47	28.66	85	147	23	15.65
75	83	363	103	28.37	74	352	67	19.03
76	16	412	115	27.91	68	327	66	20.18
77	44	397	110	27.71	83	305	49	16.07
78	26	660	176	26.67	22	496	157	31.65
79	38	497	132	26.56	55	417	100	23.98
80	63	243	64	26.34	38	306	85	27.78
81	58	71	18	25.35	90	76	7	9.21
82	52	653	165	25.27	35	553	160	28.93
83	33	1,060	266	25.09	39	847	232	27.39
84	13	178	44	24.72	82	184	30	16.30
85	76	368	88	23.91	20	230	74	32.17
86	59	386	92	23.83	49	285	72	25.26
87	65	420	100	23.81	72	353	70	19.83
88	62	468	107	22.86	80	335	56	16.72
89	24	361	78	21.61	88	279	42	15.05
90	51	250	54	21.60	89	237	35	14.77
91	72	293	59	20.14	84	288	46	15.97
92	78	131	23	17.56	91	133	12	9.02

TABLE A-6

Indiana Counties Ranked by Percent of Births 18 Years Previous Who Were Freshmen in College Anywhere in 1968 and 1960, Listed in 1968 Rank Order

1968 Rank	County Code	1950 Births	Est. 1968 Fr. Anywhere	Percent Attend.	1960 Rank	1942 Births	Est. 1960 Fr. Anywhere	Percent Attend.
0	93	93,256	46,620	49.99%	0	73,706	27,343	37.10%
1	32	524	514	98.09	1	325	204	62.77
2	64	734	636	86.65	2	655	368	56.18
3	29	639	469	73.40	7	478	208	43.51
4	30	398	283	71.11	42	375	120	32.00
5	2	4,620	3,140	67.97	13	3,425	1,422	41.52
6	41	614	416	67.75	12	437	187	42.79
7	34	1,406	857	60.95	10	1,036	447	43.15
8	40	271	165	60.89	88	259	46	17.76
9	80	366	219	59.84	24	312	117	37.50
10	53	1,075	640	59.53	6	790	348	44.05
11	90	444	253	56.98	18	362	144	39.78
12	46	1,759	986	56.05	40	1,612	526	32.63
13	45	9,876	5,467	55.36	8	7,615	3,306	43.41
14	49	13,837	7,519	54.34	4	10,519	4,916	46.73
15	6	488	263	53.89	37	452	153	33.85
16	92	431	231	53.60	36	314	108	34.39
17	85	611	319	52.21	19	519	201	38.73
18	73	580	296	51.03	33	450	158	35.11
19	10	1,336	672	50.30	51	902	268	29.71
20	17	564	282	50.00	23	510	192	37.65
21	48	2,390	1,191	49.83	32	2,024	715	35.33
22	25	340	168	49.41	17	275	112	40.73
23	79	1,734	852	49.13	9	1,205	520	43.15
24	15	624	306	49.04	86	458	83	18.12
25	71	5,469	2,641	48.29	14	3,798	1,565	41.21
26	70	403	192	47.64	58	344	95	27.62
27	35	687	324	47.16	16	569	232	40.77
28	57	551	259	47.01	48	447	135	30.20
29	91	434	204	47.00	21	296	113	38.18
30	9	805	377	46.83	35	682	235	34.46
31	42	934	430	46.04	44	860	264	30.70
32	3	966	442	45.76	56	679	190	27.98

(continued)

1968 Rank	County Code	1950 Births	Est. 1968 Fr. Anywhere	Percent Attend.	1960 Rank	1942 Births	Est. 1960 Fr. Anywhere	Percent Attend.
33	22	1,037	472	45.52%	46	830	251	30.24%
34	50	746	338	45.31	15	584	240	41.10
35	67	398	179	44.97	25	315	118	37.46
36	7	103	46	44.66	92	104	9	8.65
37	54	670	299	44.63	43	428	134	31.31
38	56	226	99	43.81	57	199	55	27.64
39	43	748	324	43.32	27	561	210	37.43
40	4	284	123	43.31	69	228	55	24.12
41	18	2,226	961	43.17	29	1,822	679	37.27
42	39	464	198	42.67	66	421	107	25.42
43	1	596	254	42.62	53	476	138	28.99
44	20	2,185	930	42.56	31	1,657	600	36.21
45	82	4,058	1,726	42.53	26	2,814	1,054	37.46
46	87	476	202	42.44	59	350	96	27.43
47	31	402	169	42.04	76	423	94	22.22
48	14	539	225	41.74	62	643	168	26.13
49	55	578	238	41.18	70	390	93	23.85
50	66	305	125	40.98	81	253	50	19.76
51	69	426	173	40.61	80	351	70	19.94
52	12	633	256	40.44	41	571	184	32.22
53	8	322	128	39.75	64	245	63	25.71
54	27	1,364	541	39.66	47	1,221	369	30.22
55	19	647	253	39.10	60	518	141	27.22
56	47	795	310	38.99	65	784	201	25.64
57	84	2,160	842	38.98	11	1,789	766	42.82
58	11	481	186	38.67	5	345	160	46.38
59	68	542	209	38.56	28	513	192	37.43
60	75	348	131	37.64	67	337	84	24.93
61	60	205	77	37.56	73	203	47	23.15
62	77	442	166	37.56	45	436	132	30.28
63	36	691	259	37.48	63	526	137	26.05
64	88	332	123	37.05	77	332	71	21.39
65	28	559	207	37.03	50	531	158	29.76
66	21	588	216	36.73	78	509	105	20.63
67	37	402	147	36.57	54	342	99	28.95
68	23	341	124	36.36	75	353	80	22.66
69	5	307	111	36.16	30	265	96	36.23

(continued)

1968 Rank	County Code	1950 Births	Est. 1968 Fr. Anywhere	Percent Attend.	1960 Rank	1942 Births	Est. 1960 Fr. Anywhere	Percent Attend.
70	89	1,632	588	36.03%	52	1,242	365	29.39%
71	74	314	111	35.35	3	278	132	47.48
72	61	264	92	34.85	71	286	68	23.78
73	86	164	56	34.15	85	147	27	18.37
74	81	135	46	34.07	61	97	26	26.80
75	83	363	123	33.88	74	352	80	22.73
76	16	412	137	33.25	68	327	79	24.16
77	44	397	131	33.00	84	305	58	19.02
78	26	660	210	31.82	22	496	187	37.70
79	38	497	158	31.79	55	417	119	28.54
80	63	243	76	31.28	38	306	101	33.01
81	52	653	197	30.17	34	553	191	34.54
82	33	1,060	318	30.00	39	847	277	32.70
83	58	71	21	29.58	90	76	8	10.53
84	13	178	52	29.21	83	184	35	19.02
85	76	368	105	28.53	20	230	88	38.26
86	59	386	110	28.50	49	285	86	30.18
87	65	420	119	28.33	72	353	83	23.51
88	62	468	128	27.35	79	335	67	20.00
89	24	361	93	25.76	87	279	50	17.92
90	51	250	64	25.60	89	237	41	17.30
91	72	293	70	23.89	82	288	55	19.10
92	78	131	27	20.61	91	133	14	10.53

APPENDIX B

SURVEY OF HIGH SCHOOL SENIORS

FIGURE B-1

IVTC Regions and Location of Institutes and Divisions

1 Northwest
Gary and Michigan City

2 St. Joseph Valley
South Bend

3 Northeast
Fort Wayne

4 Tippecanoe
Lafayette

5 North Central
Kokomo

6 East Central
Muncie

7 Wabash Valley
Terre Haute

8 Mallory Division
Indianapolis

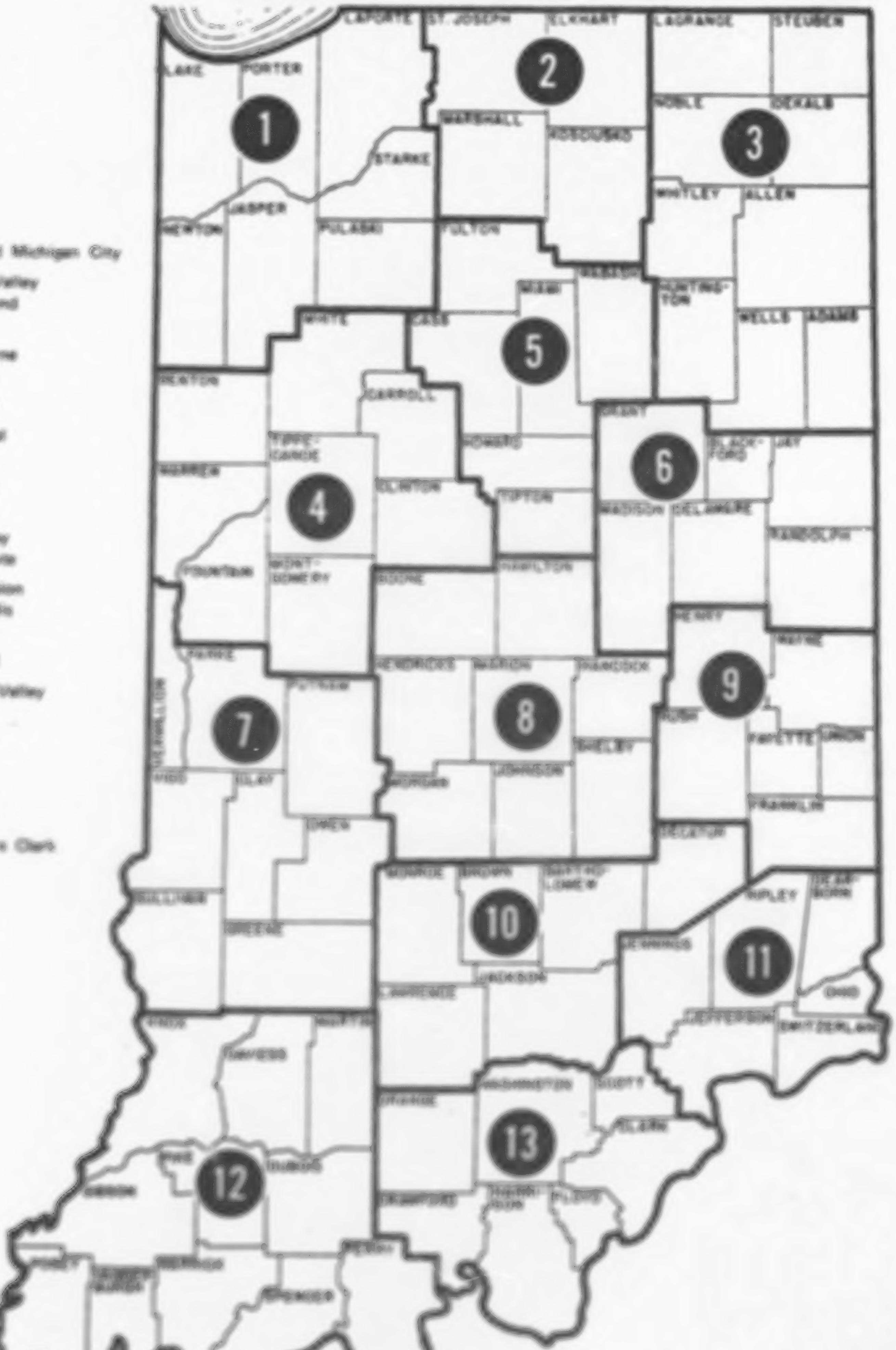
9 Whitewater
Richmond

10 White River Valley
Columbus

11 Ohio Valley
No site

12 Lincolnland
Evansville

13 George Rogers Clark
No site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LAKE
PORTER
LAPORTE
ST. JOSEPH
ELKHART
LAGRANGE
STEUBEN
NOBLE
DEKALB
MARSHALL
KOSCIUSKO
STARKE
JASPER
NEWTON
PULASKI
FULTON
WHITLEY
ALLEN
MIAMI
WABASH
HUNTINGTON
WELLS
ADAMS
WHITE
CASS
BENTON
CARROLL
TIPPECANOE
WARREN
CLINTON
HOWARD
GRANT
BLACKFORD
JAY
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
VERMILLION
RUSH
FAYETTE
UNION
SHELBY
VIGO
CLAY
MORGAN
JOHNSON
OWEN
FRANKLIN
DECATUR
MONROE
BROWN
BARTHOLOMEW
RIPLEY
DEARBORN
SULLIVAN
GREENE
JENNINGS
JACKSON
LAWRENCE
OHIO
JEFFERSON
SWITZERLAND
KNOX
MARTIN
DAVIESS
WASHINGTON
SCOTT
ORANGE
CLARK
PIKE
DUBOIS
GIBSON
CRAWFORD
HARRISON
FLOYD
POSEY
VANDERBURGH
WARRICK
PERRY
SPENCER

TABLE B-1

Selected Characteristics of Senior Respondents by Region

	Region													Total No. Respondents	% of All Respondents
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Occupation, household head															
Professional and semiprofessional	19.5%	21.6%	19.7%	18.5%	17.4%	20.1%	21.8%	24.4%	17.8%	18.2%	15.2%	15.4%	15.1%	8,574	19.8%
Managerial, official	13.2	14.6	13.1	11.5	13.5	10.5	11.1	13.3	11.2	10.8	11.4	11.8	11.4	5,458	12.6
Clerks & kindred	8.4	11.9	10.6	9.1	9.5	7.5	9.6	14.6	9.5	6.6	7.5	9.4	8.9	4,423	10.2
Skilled, semi-skilled, & unskilled	58.8	51.9	56.7	60.9	59.6	61.9	57.5	47.8	61.5	64.3	65.8	63.4	64.6	24,843	57.4
Education, household head															
Less than high sch. (+ unknown)	34.1	28.9	26.2	27.3	29.7	32.8	28.3	28.2	35.4	42.1	40.0	39.0	41.9	14,794	32.0
High school graduate	36.0	40.1	42.2	43.2	40.6	39.2	41.9	36.1	38.1	35.4	39.0	37.0	34.5	17,719	38.3
Some college	19.0	17.2	18.7	16.1	18.3	16.7	17.6	21.9	16.0	12.1	12.9	16.6	15.8	8,350	18.1
College graduate	10.8	13.8	12.9	13.4	11.4	11.3	12.2	13.8	10.4	10.3	8.1	7.5	7.8	5,356	11.6
High school concentration															
College prep.	53.0	51.5	47.9	49.7	46.9	42.8	45.0	49.6	45.6	44.6	41.8	41.5	44.0	21,643	48.1
Vocational ed.	9.4	11.3	9.0	8.8	11.2	9.4	10.9	8.6	11.8	11.1	18.5	11.8	9.9	4,581	10.2
Business ed.	17.2	15.9	17.4	16.3	17.6	17.8	16.9	17.9	17.4	20.9	16.3	23.5	20.7	8,105	18.0
General ed.	15.8	15.8	21.6	19.4	18.5	25.2	21.7	19.5	18.9	19.3	16.3	17.4	20.3	8,451	18.8
Other	4.5	5.5	4.2	5.7	5.7	4.8	5.5	4.3	6.3	4.1	7.0	5.7	5.2	2,259	5.0
Population, community of residence															
Rural--under 1,000	6.1	5.9	20.9	22.9	22.2	10.9	18.4	9.2	29.6	29.9	35.3	20.9	22.7	6,852	14.9
1,000-4,999	9.0	10.8	16.1	26.4	12.6	23.1	20.3	10.6	25.3	18.3	21.7	16.8	21.8	6,949	15.2
5,000-24,999	34.5	16.7	20.5	27.4	25.0	28.7	21.5	25.6	13.1	44.4	39.6	27.2	25.8	12,207	26.8
25,000-49,999	14.4	13.5	1.3	20.9	9.6	2.4	0.7	1.7	15.3	3.8	0.4	4.2	21.7	3,842	8.4
50,000 or higher	31.1	49.0	36.2	0.5	28.4	32.1	34.5	42.0	13.7	0.2	0.5	28.1	4.4	13,702	29.9
Unknown	4.9	4.1	5.0	1.8	2.2	2.9	4.6	10.9	3.0	3.4	2.6	2.8	3.5	2,282	5.0

SOURCE: Survey of high school seniors conducted by the Indiana Vocational Technical College with cooperation from the Indiana Higher Education Facilities Comprehensive Planning Study.

TABLE B-2

After-High School Plans of 1969 High School Seniors by County

County	Number of Respondents	% Immediate Employment	% Full-time Education	% Part-time Education
Adams	366	27.0%	45.6%	13.4%
Allen	2,272	24.6	40.6	22.5
Bartholomew	84	22.6	39.3	21.4
Benton	183	35.0	43.2	10.4
Blackford	195	31.8	31.3	17.9
Boone	110	20.9	48.2	17.3
Brown	86	23.3	31.4	23.3
Carroll	245	29.0	46.9	13.9
Cass	367	26.4	43.6	12.0
Clark	826	21.5	38.3	25.3
Clay	259	19.3	45.9	22.0
Clinton	457	25.8	40.3	20.8
Crawford	81	28.4	37.0	25.9
Daviess	222	22.1	43.7	20.3
Dearborn	319	26.0	37.9	20.1
Decatur	303	31.4	38.0	15.5
DeKalb	444	29.7	39.2	18.2
Delaware	241	22.4	49.8	15.4
Dubois	486	28.6	44.0	17.3
Elkhart	1,276	28.2	44.0	14.0
Fayette	0	--	--	--
Floyd	629	29.3	35.0	22.4
Fountain	258	23.6	43.8	19.0
Franklin	182	34.6	30.8	22.5
Fulton	113	21.2	58.4	10.6
Gibson	375	21.1	41.1	24.3
Grant	400	30.8	37.0	17.8
Greene	283	27.2	40.3	14.5
Hamilton	513	17.7	53.8	19.9
Hancock	361	20.8	45.2	21.6
Harrison	175	29.7	37.7	16.0
Hendricks	540	22.0	44.3	19.1
Henry	83	32.5	34.9	22.9
Howard	1,033	22.7	43.2	19.1
Huntington	47	27.7	51.1	14.9
Jackson	414	28.3	47.6	11.4
Jasper	0	--	--	--
Jay	290	26.6	38.6	22.4
Jefferson	343	25.7	43.7	15.7
Jennings	205	39.5	30.7	12.7
Johnson	432	30.8	33.3	16.4
Knox	406	17.5	44.6	21;2
Kosciusko	480	25.4	43.8	11.3
LaGrange	141	31.2	39.7	14.9
Lake	6,094	21.6	43.6	23.4
LaPorte	1,355	19.6	47.1	19.3

(continued)

County	Number of Respondents	% Immediate Employment	% Full-time Education	% Part-time Education
Lawrence	333	32.1%	35.1%	18.0%
Madison	1,505	23.5	43.2	18.3
Marion	5,355	21.3	45.6	22.2
Marshall	488	23.6	48.2	16.4
Martin	161	41.0	29.8	16.1
Miami	204	22.1	41.2	18.1
Monroe	80	16.3	46.3	25.0
Montgomery	375	22.9	45.6	14.1
Morgan	490	29.6	29.2	22.2
Newton	181	23.2	44.8	12.7
Noble	235	35.7	40.4	13.6
Ohio	56	32.1	46.4	16.1
Orange	254	29.5	33.5	22.0
Owen	105	29.5	29.5	26.7
Parke	64	14.1	64.1	9.4
Perry	112	42.0	20.5	17.0
Pike	138	32.6	31.9	18.8
Porter	726	27.0	45.5	15.2
Posey	282	27.0	36.5	18.1
Pulaski	188	22.9	46.8	16.0
Putnam	184	20.7	47.3	17.4
Randolph	230	28.3	37.4	19.6
Ripley	368	34.0	39.7	16.0
Rush	253	33.6	39.5	12.3
St. Joseph	2,651	18.1	46.4	23.3
Scott	0	--	--	--
Shelby	268	23.5	44.0	19.4
Spencer	248	26.2	41.9	18.1
Starke	220	36.4	37.3	14.5
Steuben	216	24.1	41.2	21.8
Sullivan	203	19.7	46.3	17.7
Switzerland	0	--	--	--
Tippecanoe	929	21.3	51.9	12.3
Tipton	254	28.0	39.0	18.9
Union	36	22.2	33.3	36.1
Vanderburgh	1,376	23.0	40.1	24.9
Vermillion	205	25.4	42.0	21.5
Vigo	972	17.4	43.4	24.5
Wabash	330	31.2	40.9	17.9
Warren	74	25.7	43.2	12.2
Warrick	360	16.4	37.5	33.6
Washington	79	36.7	39.2	15.2
Wayne	822	21.5	43.6	19.6
Wells	180	35.6	38.9	12.8
White	245	38.4	32.2	13.9
Whitley	365	31.2	33.2	17.5
TOTAL*	46,370	24.0%	42.7%	20.0%

*Other answers given included military service, marriage, and other. If these responses were included, the rows would total 100 percent.

SOURCE: Survey of high school seniors conducted by the Indiana Vocational Technical College with cooperation from the Indiana Higher Education Facilities Comprehensive Planning Study.

TABLE B-3

College Plans of 1969 High School Seniors by County

County	Public, Main	Public, Regional	Private, Indiana	Out-of-State College	Vocational or Technical	Other	Total No. Respondent (100%)
Adams	24.6%	18.5%	18.1%	9.5%	12.1%	17.2%	232
Allen	16.5	30.1	9.7	11.9	13.2	18.7	1,603
Bartholomew	28.8	1.9	11.5	19.2	19.2	19.2	52
Benton	56.3	3.6	9.8	4.5	15.2	10.7	112
Blackford	29.5	5.3	7.4	8.4	29.5	20.0	95
Boone	34.6	3.8	14.1	11.5	16.7	19.2	78
Brown	36.2	0.0	12.8	6.4	23.4	21.3	47
Carroll	36.4	4.5	11.0	3.2	28.6	16.2	154
Cass	29.2	6.2	13.5	9.6	14.6	27.0	178
Clark	18.3	30.9	3.8	11.1	18.3	17.6	551
Clay	50.3	0.0	3.0	8.9	20.7	17.2	169
Clinton	39.5	2.3	6.4	7.9	23.3	20.7	266
Crawford	32.7	1.9	19.2	11.5	23.1	11.5	52
Daviess	48.5	1.5	11.8	8.8	15.4	14.0	136
Dearborn	35.6	1.1	10.9	13.8	16.7	21.8	174
Decatur	34.3	4.1	9.9	8.7	27.3	15.7	172
DeKalb	17.2	20.0	16.5	11.9	15.4	18.9	285
Delaware	39.2	0.7	2.8	23.1	14.7	19.6	143
Dubois	34.9	1.9	15.7	8.0	18.6	20.8	312
Elkhart	29.5	6.4	12.3	19.9	15.4	16.5	826
Fayette	0.0	0.0	0.0	0.0	0.0	0.0	0
Floyd	21.0	32.5	4.2	8.1	13.9	20.2	381
Fountain	40.0	0.0	6.3	12.0	24.0	17.7	175
Franklin	29.9	2.1	3.1	9.3	29.9	25.8	97
Fulton	38.7	2.7	17.3	6.7	14.7	20.0	75
Gibson	20.1	7.9	20.5	7.9	26.8	16.9	254
Grant	25.6	1.6	23.2	9.8	18.5	21.3	254
Greene	34.7	0.6	10.8	9.1	21.6	23.3	176
Hamilton	36.6	7.4	12.3	14.8	15.6	13.4	366
Hancock	31.0	7.9	12.7	8.7	22.6	17.1	252
Harrison	21.9	20.0	10.5	7.6	20.0	20.0	105
Hendricks	39.7	12.1	8.3	6.9	14.3	18.7	363
Henry	16.3	4.1	18.4	12.2	22.4	26.5	49
Howard	26.7	20.1	7.7	10.3	18.9	16.3	688
Huntington	17.6	14.7	29.4	17.6	8.8	11.8	34
Jackson	41.1	2.9	14.1	12.0	14.5	15.4	241
Jasper	0.0	0.0	0.0	0.0	0.0	0.0	0
Jay	28.8	3.0	9.1	8.1	24.2	26.8	198
Jefferson	30.1	4.7	6.7	20.2	16.1	22.3	193
Jennings	37.8	2.2	5.6	10.0	21.1	23.3	90
Johnson	25.4	9.9	11.1	9.9	19.4	24.2	252
Knox	44.0	0.9	6.7	8.4	15.1	24.9	225
Kosciusko	31.9	8.6	15.0	11.8	17.6	15.0	313
LaGrange	21.8	4.6	17.2	20.7	13.8	21.8	87
Lake	26.5	21.1	7.2	15.4	14.4	15.4	4,367
LaPorte	27.7	21.8	9.1	10.0	16.1	15.3	987

(continued)

County	Public, Main	Public, Regional	Private, Indiana	Out-of-State College	Vocational or Technical	Other	Total No. Respondents (100%)
Lawrence	38.4%	2.0%	9.6%	11.1%	19.2%	19.7%	198
Madison	36.1	3.2	12.9	11.4	16.3	20.1	939
Marion	31.0	17.2	10.1	13.0	13.4	15.4	3,659
Marshall	23.4	6.6	20.0	20.9	15.7	13.4	350
Martin	31.5	4.5	13.5	3.4	23.6	23.6	89
Miami	35.1	3.0	12.7	9.7	23.1	16.4	134
Monroe	55.9	0.0	3.4	16.9	5.1	18.6	59
Montgomery	43.3	0.8	12.1	9.6	15.4	18.8	240
Morgan	37.2	5.7	9.4	5.7	17.8	24.2	298
Newton	37.8	2.7	9.0	10.8	22.5	17.1	111
Noble	26.3	17.5	11.9	7.5	13.8	23.1	160
Ohio	50.0	2.9	5.9	2.9	14.7	23.5	34
Orange	38.1	2.5	13.1	7.5	20.0	18.8	160
Owen	34.9	1.6	1.6	9.5	25.4	27.0	63
Parke	47.6	4.8	11.9	0.0	19.0	16.1	42
Perry	17.0	3.8	15.1	7.5	24.5	32.1	53
Pike	26.5	4.4	11.8	2.9	23.5	30.9	68
Porter	29.6	12.1	10.9	18.9	11.9	16.7	497
Posey	17.9	7.1	10.1	10.7	26.8	27.4	168
Pulaski	34.6	2.3	6.8	12.8	15.0	28.6	133
Putnam	32.5	1.7	18.8	14.5	12.8	19.7	117
Randolph	28.0	3.2	7.2	16.8	20.0	24.8	125
Ripley	41.7	2.0	13.2	9.3	17.6	16.2	204
Rush	37.6	3.5	14.9	7.1	18.4	18.4	141
St. Joseph	22.5	19.8	9.0	15.6	18.8	14.3	1,899
Scott	0.0	0.0	0.0	0.0	0.0	0.0	0
Shelby	33.7	4.4	9.4	14.9	21.0	16.6	181
Spencer	28.0	0.7	13.3	8.0	30.7	19.3	150
Starke	33.6	5.5	10.2	9.4	20.3	21.1	128
Steuben	21.7	3.6	29.0	13.8	9.4	22.5	138
Sullivan	54.3	0.0	7.1	3.1	20.5	15.0	127
Switzerland	0.0	0.0	0.0	0.0	0.0	0.0	0
Tippecanoe	61.0	1.5	3.9	10.8	11.6	11.3	620
Tipton	32.3	15.2	12.2	9.1	17.7	13.4	16
Union	24.0	0.0	4.0	28.0	36.0	8.0	25
Vanderburgh	21.3	19.4	20.4	8.3	16.6	14.0	940
Vermillion	46.2	0.0	5.3	16.7	25.0	6.8	13
Vigo	57.4	0.7	7.9	7.9	10.2	15.7	69
Wabash	41.6	8.1	16.3	11.3	8.1	14.5	22
Warren	43.5	0.0	4.3	15.2	17.4	19.6	4
Warrick	20.1	11.5	14.3	5.4	29.0	19.7	4
Washington	35.7	14.3	2.4	19.0	19.0	19.7	27
Wayne	29.1	4.2	9.1	15.2	19.6	9.5	4
Wells	25.5	15.7	9.8	9.8	17.6	22.9	50
White	45.2	2.5	7.6	10.2	17.8	21.6	10
Whitley	12.9	19.0	16.8	7.8	14.2	16.6	15
Total state	30.3	13.4	10.4	12.2	16.4	29.3	23

SOURCE: Survey of high school seniors conducted by the Indiana Vocational Technical College with cooperation from the Indiana Higher Education Facilities Comprehensive Planning Study.

APPENDIX C

CLASSIFICATION OF INDIANA COLLEGES AND UNIVERSITIES

Institution	1967 Total Enrollment
1. State universities	
Ball State	14,124
Indiana State	12,663
Indiana	27,098
Purdue	23,370
Total	77,255
2. Regional campuses	32,993
Vincennes University	2,244
Total	112,492
3. IVTC or other public post-high school vocational schools	--
4. Private universities	
Butler	4,246
Evansville	5,257
Notre Dame	7,723
Valparaiso	3,797
Centers	428
Total	21,451
5. Private colleges--Group I	
Anderson	1,530
DePauw	2,450
Earlham	1,151
Eastern Indiana Center	669
Goshen	1,263
Hanover	1,020
Indiana Central	2,524
Manchester	1,483
Marian	1,060
St. Joseph	1,373
Centers	1,130
Taylor	1,281
Wabash	891
Total	17,825

Institution	1967 Total Enrollment
6. Private colleges--Group II	
Bethel	479
Franklin	723
Grace	671
Huntington	490
Marion	739
Oakland City	611
Total	3,712
7. Catholic girls colleges	
St. Benedict	278
St. Francis	1,721
St. Mary's	1,414
St. Mary's of the Woods	648
Total	4,061
8. Engineering and technical colleges	
Indiana Institute of Technology	1,118
Rose Polytechnic Institute	970
Tri-State College	1,859
Total	3,947
9. Religion and theological schools	
Christian Theological Seminary	255
Fort Wayne Bible College	526
St. Meinrad Seminary	427
Total	1,208
Total enrollments	
Public	112,492
Private	52,204
Total	164,696

SOURCE; Developed by Indiana Higher Education Facilities Comprehensive Planning Study for the purpose of institutional generalization.

APPENDIX D

A PROFILE OF FULL-TIME FALL SEMESTER STUDENTS AT INDIANA UNIVERSITY'S DIVISION OF GENERAL AND TECHNICAL STUDIES FORT WAYNE

Preface

During the fall semester of the 1967-68 academic year, 154 new students enrolled for full-time (12 or more semester hours) study with Indiana University's Division of General and Technical Studies in Fort Wayne. In the pages which follow, one will find statistical data, supplemented by narrative, relating to this student population--the purpose being to develop a more accurate impression of what type student is representative of those attending the Division. Where did he go to high school? What did he major in? Did he achieve well in high school? From what socio-economic level does he come? These are the kinds of questions which will be answered through statistical analysis.

Method

The data contained herein were obtained by three methods:

1. a short questionnaire distributed at the beginning of an English class common to first year students
2. examination of students' university application forms in cumulative records
3. examination of Part I of the registration form used by all university students

Students who failed to complete questionnaires were mailed the questionnaire, along with a self-addressed envelope, and were asked to complete and return them. By the time this work was culminated, complete information was available on 120 of the 154 students. On the 34 remaining students, only partial data were available because some had already dropped out for academic or personal (marriage, moving from city, etc.) reasons, some had incomplete high school transcripts already processed by admissions, and a few were still being processed by admissions because of incomplete forms. In areas where data were available on all 154 students (such as high school rank, etc.), it is included and called to the reader's attention. Likewise, in other areas (such as personal information about family) where questionnaire data were a requisite, the number of respondees (120) is indicated.

PERSONAL--FAMILY DATA

Gender

Male 89 Female 65

N . . .154 These complete figures were taken directly from student registration forms. This balance of male to female students differs considerably from the fall semester of 1966, when male students outnumbered female by a 2 to 1 ratio.

Home County (Indiana), State, or Country

Fort Wayne proper	115
Adams	2
Allen (outside Fort Wayne)	6
DeKalb	7
Elkhart	1
Grant	1
Huntington	5
Jay	1
Kosciusko	1
LaGrange	1
Noble	1
Steuben	2
Wabash	1
Wells	1
Whitley	4
State of Ohio	4
British West Indies	1

N . . .154 These complete figures were taken from university application forms. They seem to substantiate the Division's current role as a "community college" serving primarily students from the immediate area. This is in keeping with 1966 fall semester ratios.

Familial Patterns

Size
(number of sons and daughters in family)

one child	10
two children	25
three children	33
four children	22
five children	15
six children	7
seven children	3
eight children	3
nine children	2

N . . .120 These figures were obtained via the questionnaire. The students responding represent an average-sized family household of 5.56 people. This figure is considerably larger than the national average of 3.4 and the Fort Wayne area average of 3.3 members per household.

Level of Parents' Formal Educations

	Father	Mother
Less than high school	26	24
High school graduate	74	77
College graduate (father only)	12	
College graduate (mother only)		11
College graduates (both parents)	8	8
Attended Indiana University	3	1

N . . .120 These figures from the questionnaire indicate that the majority of Division students came from backgrounds where parents' formal educations had been limited but where recognition of the need for formal education exists. It is logical to assume that the smaller number of students having college-graduate parents is due to the fact that such parents would be likely to encourage their children to enter baccalaureate programs if possible.

Parental Work Patterns (outside the home)

Father only	50
Mother only	2
Both parents	65
Neither	3

N . . .120 These figures came from the questionnaire. In cases where neither parent works outside the home, the child usually has a deceased father or one who is a disabled veteran or disabled worker receiving benefits.

Investigation shows that the percentage of "working mothers" of Division students is higher than the average in the Fort Wayne community, where it is normal for 1 of 3 married women to be employed outside the home at any given time.

This percentage, however, is not regular from one age group to another. Typically, the percentage is higher for mothers of college-age children, probably due to (1) the fact that mothers of children this age are usually more free of child-rearing obligations and can work and (2) the increased financial burden of educational costs for grown children may mandate the necessity for the mother's return to the labor market. The latter factors tend to explain the relatively high percentage of students who have "working mothers."

Type Work Done by Father of Household

Craftsman (typical responses: carpenter, plumber, glass-cutter, millwright, tinner)	3
Laborer-unskilled (typical responses: factory worker, station attendant, machanic, maintenance, drill press operator, assembly line worker)	48
Supervisory-industrial (typical responses: foreman, manager, supervisor, inspection director)	18
Management-business (typical responses: personnel director, hospital administrator, vice-president of sales)	8
Professional-requiring formal education (typical responses: mortician, accountant, registered nurse, teacher, research technologist)	8
Self-employed (typical responses: dairy farmer, insurance, realtor, contractor, part owner of business, landscaping business owner)	25
Service Occupations (typical responses: federal government, policeman, postal worker, scout executive)	7
Deceased, disabled, or retired	3

N . . .120 Students were asked, "what is the nature of your father's employment (give exact duties)?" Responses were then categorized as listed above. It is interesting to note the high correlation between the level of the parents' education and the nature of their occupational levels as a group.

The Student Himself

High School Major

College preparatory	76
Business	33
General	11

N . . .120 This figure from the questionnaire indicates that a high percentage of all high school students pursue the college preparatory course; but, in reality, a much smaller percentage actually enter college (defined here as a baccalaureate program). It is not unusual when speaking to a high school group to ask the question, "How many of you plan to go on to college?" and see 95% of the hands raised. This is probably due to two major reasons: First, the student is forced to pursue a college preparatory course even if he has only a remote thought about college; otherwise, he will lack the necessary units for admission should he become more serious and seek such an education. He cannot study "what he really thinks he wants to" in high school (e.g.-business) for fear he may change his mind later and find the opportunity for baccalaureate study ended when he made a decision in his freshman year. Second, he may simply have unreal aspirations. He may be completely unable to cope with college work and not learn this until applying for baccalaureate work, only to find he is inadmissible because of low high school rank or board scores. This is very unfortunate but undoubtedly occurs more often than counselors would like to realize.

Academic Status in High School
(class graduation rank)

1st Quartile (upper 25%)	22
2nd Quartile	43
3rd Quartile	48
4th Quartile (lower 25%)	35
GED	4
not shown on application	2

N . . .154 These complete figures were obtained from student application forms. As would be expected, most of the Division students fell within the middle 50% of their graduating classes. The figures in the upper and lower quartiles, however, indicate that while many superior high school graduates are recognizing and seeking opportunities through technology, others with weaker academic backgrounds likewise envision this program as one in which they can succeed.

Major Areas of Concentration at
Division of General and Technical Studies

Accounting	23
Data Processing	23
Marketing/Distribution	15
Office Technology	15
Operations Supervision	11
X-Ray Technology	26
Undecided	7

N . . .120 Aside from the X-Ray Technology program, which is a cooperative program with the three local hospitals, the two most popular programs are Accounting and Data Processing. Again, this is in keeping with curricular experience in the fall of 1966.

Outside Employment by Students

Hrs. per week		Earnings	
0- 5	0	Less than $10	0
6-10	8	$10-20	14
11-15	11	20-30	15
16-20	7	30-40	16
21-30	30	40-50	9
31-40	6	50 plus	13
40 or more	5		
			67
	67 total working		

N . . .120 Not including the 22 X-Ray students who work at their respective hospitals, we find 67 of the remaining 98 students work for remuneration on some type of hourly basis. This high ratio may be indicative of a real need for money, or it may reflect an attitude regarding the relative importance of time for academic work. There is little doubt that the number of hours worked has been reflected in the grades of some students, especially those who are slightly borderline to begin. This must be a vital message to convey to future incoming students lest they suffer the effects of poor judgment in respect to outside employment while carrying normal academic course loads.

Other Post-High School Educational Experiences Prior to the Division of General and Technical Studies

At Regional Campus	10
At Bloomington	2
International Business College	3
Indiana Institute of Technology	2
Finishing Schools	4
Loyola	1
Marshalltown Jr. (Iowa)	1
Defiance	1
	24

N . . .120 This figure is from the questionnaire. Most, though not all, of these students were ineligible to return as students in good standing and were admitted for limited course loads on immediate probation. Their degree of success thus far has been quite varied.

General Conclusions

Taking a look at the "average" full-time (12 hrs. or more) student at the Division of General and Technical Studies the fall semester of 1967-68, we find the student is somewhat more likely to be a male (89 to 65) from the city of Fort Wayne. He is likely to come from a relatively large family where the parents have completed high school but have seldom attended college. In the majority of cases, both of the student's parents work outside the home, and the father's employment is most likely to be of a non-professional nature.

The student himself is most likely to have pursued the college preparatory course in high school and to have graduated somewhere in the middle 50% of his class. The odds are 2 to 1 that he holds some type of outside monetary employment while attending school as a full-time student. He comes from what a sociologist would describe as a predominantly middle-class background and reflects the values of that general group.

SOURCE: Prepared by -- Wade Fredrick, director of admissions, Division of General and Technical Studies, Indiana University, Fort Wayne, Indiana.

APPENDIX E

PROFILE OF INDIANA UNIVERSITY REGIONAL CAMPUS STUDENTS
1967-68 SCHOOL YEAR
BY PERCENTAGE OF RESPONDENTS

	Total*	Indianapolis	Southeast	South Bend	Kokomo	Fort Wayne	Northwest
1. Respondents	13,740	3,598	1,540	2,881	1,043	1,868	2,810
Male	52%	53%	55%	51%	54%	53%	47%
Female	48	47	45	48	46	47	51
2. Marital Status							
Single	58	55	54	58	46	65	61
Married	38	40	43	39	50	32	33
3. Expect to live permanently in region served by this campus							
Yes (quite certain)	63	67	66	58	60	64	n.a.
No (not very likely)	13	11	11	17	15	12	n.a.
Uncertain	23	22	23	25	25	24	n.a.
4. Racial background							
American Indian	2	2	2	1	2	2	1
Caucasian	87	85	90	93	87	91	80
Negro	5	9	2	2	2	1	10
5. Where students live +							
With parents	49	41	48	50	41	55	57
With relatives	19	21	22	15	26	14	18
Alone (house, apartment, room)	13	17	12	11	12	13	11
With friends	7	11	5	6	7	7	3
6. Hours of outside work per week							
0	22	19	21	22	22	24	24
1-15	12	10	11	14	12	18	12
16-25	14	13	9	15	10	16	14
26-35	7	6	9	7	5	6	8
36-40	29	36	29	25	32	21	27
over 40	15	15	19	16	18	14	10

* Only major categories are reported here, and the tabulation may not add to total responses. Many did not answer all of the questions.

+ Note no provision for response of "with spouse."

(continued)

	Total*	Indianapolis	Southeast	South Bend	Kokomo	Fort Wayne	Northwest
7. Main way studies financed							
Savings	12	11	10	13	17	12	10
Parents	18	17	18	18	16	21	16
Work during academic year	35	43	37	35	31	29	31
Summer work	9	5	5	8	8	16	15
Spouse income	10	8	10	10	14	8	11
Scholarships	3	3	3	2	2	3	2
Loans	3	3	4	3	2	3	2
G.I. bill	5	5	6	4	4	5	4
8. Applying for financial aid?							
Yes	17	16	18	17	17	21	15
No	81	83	81	82	82	78	81
9. Actively working toward degree?							
Yes	81	76	80	85	74	84	82
No	17	22	18	13	23	14	13
10. Prefer to register for classes which meet:							
Before noon	13	7	11	13	16	22	15
Afternoon	6	7	3	7	5	4	8
Morning & afternoon	20	15	18	20	18	29	23
Afternoon & evening	14	18	12	14	13	9	12
After 6 p.m.	34	41	44	33	37	25	27
Makes little difference	10	10	9	12	11	10	10
11. Credit hours in present semester							
1-4	27	30	26	26	32	20	24
5-6	17	19	20	16	20	13	13
7-8	5	7	4	5	5	3	5
9-10	4	5	5	4	3	4	3
11-12	10	11	9	8	8	11	10
13-14	19	13	16	15	18	26	28
15-16	14	10	12	18	11	20	14
17-18	3	1	3	5	1	3	3
19-20	0	0	0	0	0	0	.10
Part-time (1-10)	53	61	55	51	60	40	44
Full-time (11-20)	46	35	40	46	38	60	53

(continued)

	Total*	Indianapolis	Southeast	South Bend	Kokomo	Fort Wayne	Northwest
12. Academic standing							
Freshman	45	43	45	40	60	50	43
Sophomore	19	19	21	20	17	20	19
Junior	12	12	11	15	8	13	14
Senior	7	6	4	9	2	7	8
Transient (do not expect to get degree from I.U.)	5	6	5	4	13	4	3
13. Where do you plan to complete your degree?							
IU (Bloomington)	34	42	39	26	35	31	31
This regional campus	44	36	37	52	27	51	52
Don't	8	--	9	6	13	6	4
Purdue, Ball State, Indiana State ‡	4	3	4	4	11	4	3
Another regional **	2	2	2	2	3	2	1
14. If this campus did not exist, I would:							
Not go to college	13	6	14	11	23	13	--
Attend Purdue ++	8	16	3	5	13	8	--
Attend Bloomington++	24	32	29	28	23	33	--
Attend elsewhere ++	36	42	51	47	41	44	--
15. If you could choose, where would you rather go to college?							
A regional campus	44	41	50	46	47	44	41
Bloomington	22	29	17	21	20	18	23
Sometime at both	21	20	22	18	20	28	21
Another college	9	7	9	12	13	8	9
16. Reasons for attending an Indiana University Regional campus and not some other school or location.							
Academic considerations	31	43	27	26	25	35	29
Location	40	33	40	40	48	35	46
Financial considerations	20	15	25	23	17	21	17
Other	9	9	8	11	10	9	8

‡ Does not include regional campuses.

** Northwest campus included different categories and is not comparable.

++ These figures do not include the Northwest data, which were as follows: not go, 13%; Purdue or St. Joseph, 37%; Bloomington, Lafayette and elsewhere, 44%.

SOURCE: I.U. Division of Regional Campuses survey for the 1967-68 school year. Only a portion of the survey is summarized in this table.

APPENDIX F

SELF-PROJECTIONS OF ENROLLMENT BY INDIANA UNIVERSITY AND PURDUE UNIVERSITY

The sources for the tables in Appendix F are:

Indiana University data are from "Fall Enrollment Projections" (Bloomington, Ind.: Indiana University Division of Regional Administration, December 12, 1967). The Indiana University projections include only credit students.

Purdue University data are from H. H. Hirschl, "Fall 1968 Edition: Regional Campus Enrollment Report and Projection for First Semester 1966-67 through 1978-79" (West Lafayette, Ind.: Purdue University Regional Campus Administration, October 30, 1968) and H. H. Hirschl, "Regional Campus Enrollment Report & Projection for First Semester 1966-67 through 1977-78" (West Lafayette, Ind.: Purdue University Regional Campus Administration, October, 1967). Note that Purdue projections extend only to 1978-79 and that in this report these projections were extended to 1985-86 for comparative purposes. An attempt was made to use consistent methodology, but the 1985 projections should not be attributed to Hirschl.

TABLE F-1

Indiana University Regional Campus Projections: 1968, 1978, 1985

Campus	Full-time Undergraduates	Part-time Undergraduates	Graduate Students	Special Students*	Undergraduates	All Credit Students	FTE (All)+
Fort Wayne							
1968-69	1,639	1,239	275	700	2,878	3,153	2,350
1978-79	5,169	2,049	565	2,530	7,218	7,783	6,381
% Increase	215.4%	65.4%	105.5%	261.4%	150.8%	146.8%	171.5%
1985-86	5,590	2,215	610	2,736	7,805	8,415	6,900
% Increase	8.1%	8.1%	8.0%	8.1%	8.1%	8.1%	8.1%
Indianapolis							
1968-69	1,380	2,700	945		4,080	5,066	3,045
1978-79	5,696	4,385	1,370		10,081	11,451	8,345
% Increase	312.8%	62.4%	44.9%		147.0%	126.0%	174.0%
1985-86	5,636	4,338	1,355		9,974	11,329	8,256
% Increase	-1.1%	-1.1%	-1.1%		-1.1%	-1.1%	-1.1%
Kokomo							
1968-69	519	691	100		1,210	1,310	903
1978-79	1,688	1,003	359		2,691	3,050	2,348
% Increase	225.2%	45.1%	259.0%		122.4%	132.8%	160.0%
1985-86	1,669	993	354		2,662	3,016	2,320
% Increase	-1.1%	-1.0%	-1.4%		-1.0%	-1.1%	-1.2%
Northwest							
1968-69	1,849	1,299	668		3,148	3,869	2,721
1978-79	4,629	1,778	969		6,407	7,376	5,841
% Increase	150.4%	36.8%	45.0%		103.5%	90.6%	114.6%
1985-86	4,580	1,758	958		6,338	7,296	5,778
% Increase	-1.1%	-1.1%	-1.1%		-1.1%	-1.1%	-1.1%
South Bend							
1968-69	1,603	1,311	437		2,914	3,473	2,404
1978-79	5,179	1,903	634		7,082	7,716	6,341
% Increase	223.0%	45.1%	45.0%		143.0%	122.1%	163.8%
1985-86	5,389	1,980	661		7,369	8,083	6,599
% Increase	4.1%	4.0%	4.25%		4.1%	4.8%	4.1%

(continued)

Campus	Full-time Undergraduates	Part-time Undergraduates	Graduate Students	Special Students*	Undergraduates	All Credit Students	FTE (All)+
Southeast							
1968-69	789	961	342		1,747	2,070	1,292
1978-79	2,384	1,602	594		3,986	4,580	3,236
% Increase	203.3%	66.7%	73.7%		128.1%	121.3%	150.5%
1985-86	2,406	1,586	630		3,992	4,632	3,278
% Increase	0.9%	-1.0%	6.1%		0.2%	1.1%	1.3%
Total							
1968-69	7,776	8,201	2,767	700	15,977	18,941	12,715
1978-79	24,745	12,720	4,491	2,530	37,465	41,956	32,492
% Increase (1968-78)	218.2%	55.1%	62.3%	261.4%	134.5%	121.5%	155.5%
1985-86	25,270	12,870	4,568	2,736	38,140	42,771	33,131
% Increase (1978-85)	2.1%	1.1%	1.7%	8.1%	1.8%	1.9%	2.0%

*"Special Students" include the students at the Division of General and Technical Studies in Fort Wayne. These students are not included in the total for Indiana University.

+ FTE (full-time equivalent) for Indiana University campuses is:
2 part-time undergraduates = 1 full-time.
3 graduates = 1 full-time.
For the Southeast Campus 2.65 part-time undergraduates = 1 full-time, and 2.4 graduates = 1 full-time.

TABLE F-2

Purdue University Regional Campus Projections: 1968, 1978, 1985

Campus	Full-time Undergraduates	Part-time* Undergraduates	Graduate Students	Noncredit Students	Undergraduates	All Students (Credit & Non-credit)	FTE (All)+
Calumet							
1968-69	1,620	1,207	684	399	2,827	3,910	2,339
1978-79	4,405	1,531	1,080	586	5,936	7,602	5,394
% Increase	171.9%	26.8%	57.9%	46.9%	110.0%	94.4%	130.6%
1985-86	5,257	1,760	1,150	719	7,017	8,886	6,390
% Increase	19.3%	15.0%	6.5%	22.7%	18.2%	16.9%	18.5%
Fort Wayne							
1968-69	1,126	1,235	316	66	2,361	2,743	1,617
1978-79	3,803	1,577	540	104	5,380	6,024	4,468
% Increase	237.7%	27.7%	70.9%	57.6%	127.9%	119.6%	177.4%
1985-86	4,519	1,812	610	136	6,331	7,077	5,287
% Increase	18.8%	14.9%	13.0%	30.8%	17.7%	17.5%	18.3%
Indianapolis							
1968-69	1,284	1,796	666	179	3,080	3,925	2,093
1978-79	3,849	2,299	1,030	265	6,148	7,443	4,938
% Increase	199.8%	28.0%	54.9%	48.4%	99.6%	89.6	135.9%
1985-86	4,562	2,642	1,100	325	7,204	8,629	5,801
% Increase	18.5%	14.9%	6.8%	22.6%	17.2%	15.9%	17.5%
North Central							
1968-69	464	608	121	---	1,072	1,193	687
1978-79	1,708	778	340	---	2,486	2,826	2,035
% Increase	268.1%	28.0%	181.0%	---	131.9%	136.9%	196.2%
1985-86	2,036	895	410	---	2,931	3,341	2,416
% Increase	19.2%	15.0%	20.6%	---	17.9%	18.2%	18.7%
All Campuses							
1968-69	4,494	4,846	1,787	644	9,340	11,771	6,736
1978-79	13,765	6,185	2,990	955	19,950	23,895	16,835
% Increase	206.3%	27.6%	67.3%	48.3%	113.6%	103.0%	149.9%
1985-86	16,388	7,109	3,270	1,180	23,497	27,947	19,894
% Increase	19.1%	14.9%	9.4%	23.6%	17.8%	17.0%	18.2%

*Purdue University separates part-time students into those taking only one course (part-time 1) and those taking two or more courses but less than 12 credit hours (part-time 2).

+The specific equation for total FTE is not presented in Hirschl's report, but it has been estimated for this study.

TABLE F-3

Self-Projections Summary

	Full-time Undergraduates	Part-time Undergraduates	Graduates	Noncredit Students	Undergraduates	All Students*	FTE (All)
1968-69							
Purdue U.	4,494	4,846	1,787	644	9,340	11,771	6,736
Indiana U.	7,776	8,201	2,767	700	15,977	18,941	12,715
Total	12,270	13,047	4,554	1,344	25,317	30,712	19,451
1978-79							
Purdue U.	13,765	6,185	2,990	955	19,950	23,895	16,835
Indiana U.	24,745	12,720	4,491	2,530	37,465	41,956	32,492
Total	38,510	18,905	7,481	3,485	57,415	65,851	49,327
% Increase 1968-78							
Purdue U.	206.3%	27.6%	67.3%	48.3%	113.6%	103.0%	149.9%
Indiana U.	218.2	55.1	62.3	261.4	134.5	121.5	155.5
1985							
Purdue U.	16,388	7,109	3,270	1,180	23,497	27,947	19,894
Indiana U.	25,270	12,870	4,568	2,736	38,140	42,771	33,131
Total	41,658	19,979	7,838	3,916	61,637	70,718	53,025

*Includes only credit students for Indiana University (graduate and undergraduate), and noncredit students enrolled in the Division of General and Technical Studies at Fort Wayne only.

TABLE F-4

I.U. Regional Campus Enrollment & Self-Projections for Full- and Part-time Undergraduate Students

Campus	Full-time Undergraduates		Part-time Undergraduates		Total Number Credit Students*
	Number	Percent	Number	Percent	
Fort Wayne					
1963	267	24.65%	556	51.34%	1,083
1964	415	31.11	697	52.25	1,334
1965	705	38.48	890	48.58	1,832
1966	1,075	47.15	943	41.36	2,280
1967+	1,389	49.46	1,169	41.63	2,808
1968	1,639	51.98	1,239	39.29	3,153
1969	1,934	54.49	1,313	37.00	3,549
1975	4,597	66.38	1,824	26.34	6,925
1985	5,590	66.43	2,215	26.32	8,415
Indianapolis					
1963	301	8.60	2,233	63.76	3,502
1964	444	12.07	2,205	59.95	3,678
1965	806	19.64	2,368	57.70	4,104
1966	966	25.53	2,025	53.51	3,784
1967+	1,104	24.39	2,523	55.73	4,527
1968	1,380	27.24	2,700	53.30	5,066
1969	1,725	30.77	2,889	51.53	5,606
1975	5,369	49.75	4,132	38.29	10,792
1985	5,636	49.75	4,338	38.29	11,329
Kokomo					
1963	129	12.36	857	82.09	1,044
1964	146	16.11	716	79.03	906
1965	313	29.39	696	65.35	1,065
1966	323	31.95	628	62.12	1,011
1967+	369	32.92	628	56.02	1,121
1968	519	41.79	691	55.64	1,242
1969	629	43.23	726	49.90	1,455
1975	1,591	55.36	945	32.88	2,874
1985	1,669	55.34	993	32.92	3,016

*Total number of credit students includes graduate students.

+ 1967 figures for all campuses are the actual count.

Campus	Full-time Undergraduates Number	Full-time Undergraduates Percent	Part-time Undergraduates Number	Part-time Undergraduates Percent	Total Number Credit Students*
Northwest					
1963	584	20.95%	1,630	58.49%	2,787
1964	820	31.19	1,192	45.34	2,629
1965	1,251	38.42	1,323	40.63	3,256
1966	1,392	42.14	1,214	36.75	3,303
1967†	1,608	46.03	1,249	35.76	3,493
1968	1,849	47.79	1,299	33.57	3,869
1969	2,126	50.89	1,351	32.34	4,178
1975	4,362	62.75	1,676	24.11	6,951
1985	4,580	62.77	1,758	24.10	7,296
South Bend					
1963	367	19.54	1,231	65.55	1,878
1964	469	23.13	1,299	64.05	2,028
1965	895	35.81	1,280	51.22	2,499
1966	1,192	42.91	1,087	39.13	2,778
1967†	1,336	44.52	1,249	41.62	3,001
1968	1,603	46.16	1,311	37.75	3,473
1969	1,923	51.16	1,377	36.63	3,759
1975	4,879	67.11	1,793	24.66	7,270
1985	5,389	66.67	1,980	24.50	8,083
Southeast					
1963	228	18.10	766	60.80	1,260
1964	294	18.88	915	58.77	1,557
1965	468	29.77	827	52.61	1,572
1966	598	34.55	829	47.89	1,731
1967†	678	35.33	915	47.68	1,919
1968	786	37.97	961	46.43	2,070
1969	912	40.00	1,009	44.25	2,280
1975	2,183	51.52	1,510	35.64	4,237
1985	2,406	51.94	1,586	34.24	4,632
Total Regional Campuses					
1963	1,876	16.24	7,273	62.95	11,554
1964	2,588	21.33	7,024	57.90	12,132
1965	4,438	30.97	7,384	51.54	14,328
1966	5,546	37.25	6,726	45.18	14,887

(continued)

Campus	Full-time Undergraduates Number	 Percent	Part-time Undergraduates Number	 Percent	Total Number Credit Students*
Total Regional Campuses (continued)					
1967[+]	6,484	38.44	7,733	45.84	16,869
1968	7,776	41.20	8,201	43.45	18,873
1969	9,249	44.41	8,665	41.60	20,827
1975	22,981	58.85	11,880	30.42	39,049
1985	25,270	59.08	12,870	30.09	42,771

APPENDIX G

TOTAL UNDERGRADUATE ENROLLMENT IN INDIANA COLLEGES AND UNIVERSITIES, BY COUNTY OF RESIDENCE, PROJECTED FROM 1967 to 1985

County	Total 1967-68 Undergraduates	Percent of 1967 Total	Undergraduates, 1985-86 Projection*
Adams	507	0.372%	837
Allen	4,647	3.412	7,677
Bartholomew	1,051	0.771	1,734
Benton	298	0.218	490
Blackford	219	0.160	360
Boone	573	0.420	945
Brown	112	0.082	184
Carroll	282	0.207	465
Cass	810	0.594	1,336
Clark	1,141	0.837	1,883
Clay	555	0.407	915
Clinton	602	0.442	994
Crawford	130	0.095	213
Daviess	521	0.382	859
Dearborn	321	0.235	529
Decatur	362	0.265	596
DeKalb	543	0.398	895
Delaware	2,311	1.695	3,814
Dubois	611	0.448	1,008
Elkhart	1,904	1.398	3,145
Fayette	376	0.276	621
Floyd	812	0.596	1,341
Fountain	279	0.204	459
Franklin	252	0.185	416
Fulton	342	0.251	565
Gibson	643	0.472	1,062
Grant	1,336	0.980	2,205
Greene	579	0.425	956
Hamilton	978	0.718	1,615
Hancock	565	0.414	931
Harrison	291	0.213	479
Hendricks	988	0.725	1,631
Henry	810	0.594	1,336
Howard	1,458	1.070	2,407
Huntington	676	0.496	1,116
Jackson	537	0.394	886
Jasper	299	0.219	493

(continued)

County	Total 1967-68 Undergraduates	Percent of 1967 Total	Undergraduates, 1985-86 Projection*
Jay	355	0.260%	585
Jefferson	336	0.246	553
Jennings	181	0.132	297
Johnson	929	0.682	1,534
Knox	883	0.648	1,458
Kosciusko	877	0.643	1,446
La Grange	175	0.128	288
Lake	11,128	8.170	18,382
La Porte	2,160	1.586	3,568
Lawrence	547	0.401	902
Madison	2,302	1.690	3,802
Marion	16,895	12.405	27,911
Marshall	670	0.491	1,104
Martin	191	0.140	315
Miami	566	0.415	934
Monroe	2,117	1.554	3,496
Montgomery	620	0.455	1,024
Morgan	559	0.410	922
Newton	243	0.178	400
Noble	476	0.349	785
Ohio	34	0.024	54
Orange	210	0.154	346
Owen	152	0.111	249
Parke	274	0.201	452
Perry	275	0.201	452
Pike	193	0.141	317
Porter	1,498	1.099	2,472
Posey	408	0.299	672
Pulaski	214	0.157	353
Putnam	433	0.317	713
Randolph	487	0.357	803
Ripley	321	0.235	528
Rush	368	0.270	607
St. Joseph	5,163	3.790	8,527
Scott	174	0.127	286
Shelby	554	0.406	913
Spencer	291	0.213	479
Starke	233	0.171	385
Steuben	344	0.252	567
Sullivan	415	0.304	684
Switzerland	46	0.033	74
Tippecanoe	2,195	1.611	3,624
Tipton	311	0.228	513
Union	93	0.068	153
Vanderburgh	5,081	3.730	8,392

(continued)

County	Total 1967-68 Undergraduates	Percent of 1967 Total	Undergraduates, 1985-86 Projection*
Vermillion	351	0.257%	578
Vigo	2,847	2.090	4,702
Wabash	713	0.523	1,177
Warren	141	0.103	232
Warrick	447	0.328	738
Washington	256	0.187	421
Wayne	1,388	1.019	2,455
Wells	451	0.331	745
White	417	0.306	688
Whitley	389	0.285	641
Total Indiana undergraduates in Indiana institutions	98,098	72.029	162,096
Total undergraduates, Indiana institutions	136,191	100.000	225,000

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*For purposes of projection in this report, it is assumed that there will be 225,000 undergraduates in Indiana colleges and universities in 1985-86, with the same portion of the total coming from each county as in 1967-68. The figures for 1985 are "basic county enrollment" and do not include increases that might result from the creation of new institutions in the state. This method allows for the extension of the multiple influences on college attendance (as indicated by "participation rate") into the future without quantifying these influences. A change in basic county structure (for example, family income levels) would result in changing influences not considered here.

SOURCE: 1967-68 enrollment is based on Nelson M. Parkhurst and Betty Suddarth, Potential Enrollment for Indiana Colleges and Universities, Current Status Report 2 (Bloomington, Ind.: Indiana Advisory Commission on Academic Facilities, 1968).